University of St. Thomas Law Journal

Volume 10
Issue 2 *Fall 2012*

Article 7

2012

It's Not a Game Anymore, Or Is It?: Virtual Worlds, Virtual Lives, and the Modern (Mis)Statement of the Virtual Law Imperative

Marc Andrew Spooner

Bluebook Citation

Marc Andrew Spooner, Comment, *It's Not a Game Anymore, Or Is It?: Virtual Worlds, Virtual Lives, and the Modern (Mis)Statement of the Virtual Law Imperative*, 10 U. St. Thomas L.J. 533 (2012).

COMMENT

IT'S NOT A GAME ANYMORE, OR IS IT?: VIRTUAL WORLDS, VIRTUAL LIVES, AND THE MODERN (MIS)STATEMENT OF THE VIRTUAL LAW IMPERATIVE

MARC ANDREW SPOONER*

INTRODUCTION

The concept of virtual reality is commonplace in the contemporary world. Yet those who are depicted in fiction as a generation of street-smart cyberpunks have in reality cut their mohawks into comb-overs and tossed their wallet chains. The modern iteration of the tech-savvy cybercitizen wears a mauve pantsuit to work. She maintains a real-life job at a mid-sized business, a corporate law office, or a medical institution. She listens to hip, instrumental rock-and-roll rather than industrial electronica. To date, nobody plugs in to a worldwide computer network hosting millions of individuals in a future-chic, virtual world with a sort of corporeal interface, but some do so with a keyboard and a mouse. Every day millions of people deploy digital representations of themselves in a space that, in many cases, can closely resemble the real-world. From everyday social networking web-

* Marc Andrew Spooner, J.D., graduated from the University of St. Thomas School of Law where he served as the Editor-in-Chief of the UST Law Journal and enjoyed composing prolix written correspondence to an astute and tolerant staff, among other things. The persons who encouraged the full execution of this article are myriad, but the author would like to express a unique personal gratitude to the legendary Professor Stephen J. Cribari, without whose enthusiasm this article may not have been conceived; to Jason S. Raether, who has indulged innumerable conversations on the topic over the last several years; to the USTLJ staff for its boundless patience and tireless work; and to Ignatius J. Reilly, a capricious muse if not much more: "The grandeur of my physique, the complexity of my worldview, the decency and taste implicit in my carriage, the grace with which I function in the mire of today's world—all of these at once confuse and astound Clyde [the average internet user]. Now he has relegated me to working in the French Quarter [a virtual world], an area which houses every vice that man has ever conceived in his wildest aberrations, including, I would imagine, several modern variants made possible through the wonders of science." JON KENNEDY TOOLE, A CONFEDERACY OF DUNCES 195 (1980).

sites[1] to fully immersive, three-dimensional galaxies,[2] the quality of likeness between the user and the avatar is a growing constant in virtual worlds. But so is the quality of measured unlikeness.

Within—or outside of—these virtual spaces, users can chat, share photographs, and tell stories; they can trade real money for virtual assets that many regard as highly as some of their real-life physical treasures. And as our technological capacity advances, so does the level of realism we can reproduce. In the future one might leave work and run a virtual alpine skiing simulation complete with sensory stimulation and hyperreal imagery; one might run a profitable real estate business; one might become a judge on a virtual bench and preside over virtual trials for violations of a unique virtual code of law; one might vote in a presidential election twice every four years—once in the real-world, once in a virtual world. Indeed, people already do such things. And many believe that virtual worlds have become such a significant part of the actual world that they should be treated similarly. Users contend that their avatars have rights and that virtual worlds should import real-world laws as a means to control the threat of virtual crime and to ensure the consistency of their highly-prized, virtual lives. This Comment argues that they are wrong.

The first section briefly addresses the history and nature of virtual worlds and provides a context for the discussion of modern user interaction with them. The second section offers an overview of virtual worlds today, discusses the avatar as an object of unique user interest, and delves into the underlying motivations driving users to engage others in virtual worlds. Section two further examines the underlying problem of the user-developer relationship as not just a power differential, but as a series of necessary growing pains felt by parties to an internecine struggle bound by the fundamental—yet diametrically opposed—elements of user content creation and underlying code. The third section examines the entirety of virtual law as merely an extension of its most prolific invocation of real law: property interests. Finally, the fourth section evaluates the state of one advanced virtual marketplace—that of the virtual world Second Life—and contemplates the viability of establishing free-standing virtual property rights as a prerequisite to the creation of a more suffusive virtual legal regime. Section four contemplates the prevalence and importance of property rights to virtual claimants, to the user base as a whole, and to the virtual world developer. Furthermore, it considers whether such a development is actually necessary within the scope of common user claims.

1. *See* FACEBOOK, http://www.facebook.com (last visited Oct. 21, 2012); MYSPACE, http://www.myspace.com (last visited Oct. 21, 2012); LINKEDIN, http://www.linkedin.com (last visited Oct. 21, 2012).

2. *See* Ultima Online (Electronic Arts 1997); STAR WARS GALAXIES (LucasArts Entertainment 2003); WORLD OF WARCRAFT (Blizzard Entertainment 2004).

The Comment concludes that, put simply, the need for law specific to virtual worlds is overstated and the rationale therefore unsound. Barring isolated, necessary instances of congressional legislation targeting specific and objectively harmful online behavior,[3] the law should not expand its reach into virtual worlds beyond that which is patently necessary. The development of virtual law or a virtual rights regime is largely unnecessary in the context of everyday virtual world use. More importantly, however, virtual law would undermine a majority of users' needs by limiting the capacity of game developers to respond effectively to the user communities they serve. In the context of what "rights" are at stake, there is no clear benefit to injecting such protections into a realm that in many ways signifies an escape from the obligations that derive therefrom. Existing law is competent to protect both the real and virtual interests of users who choose to find ways to let their virtual and real lives intersect. When law or contract falls short, the courts have not been hesitant to define the duties incumbent on both virtual world users and virtual world developers. It is reasonably clear, however, that they are unwilling to tell the parties how they must play. Though some people do not treat it as such, it is just a game, after all.

I. A Brief History

> *Here was this display that could do all sorts of good things! So we started talking about it, figuring what would be interesting displays. We decided that probably you could make a two-Dimensional maneuvering sort of thing, and decided that naturally the obvious thing to do was spaceships.*
>
> Steve Russell, creator of *Spacewar*[4]

Following the advent of network computing in the late 1960s, an enthusiastic group of game developers started the trend of remote multiuser interfacing—the foundation of what we know today as online gaming.[5] Although people had been engaging in adversarial gameplay for centuries through board games such as chess, the fact that players could do so in real time over great distance was entirely new.

The first of the truly multiplayer virtual worlds was called MUD—short for Multi-User Dungeon. It was an adventure game involving fantasy elements and user-driven combat. Users followed a second person, text-based narrative that described each location and any items or persons that were there.[6] The user navigated the game by typing commands such as

3. The exploitation of minors (under 13), for example, was addressed by the Child Online Privacy Protection Act ("COPPA"), 15 U.S.C. §§ 6501–06 (1998).

4. Stewart Brand, *Spacewar: Fanatic Life and Symbolic Death Among the Computer Bums*, Rolling Stone, Dec. 7, 1972, at 50, 50–58, *available at* http://www.wheels.org/space-war/stone/rolling_stone.html (quoting Steve Russell, creator of *Spacewar*).

5. Greg Lastowka, Virtual Justice: The New Law of Online Worlds 37 (2010).

6. *Id.* at 39.

"get," "go," or "kill," and the narrative described the consequences of each command.[7] The platform—or the design of the game itself—was simple to understand, easy to design, and rapidly garnered popular appeal among users.

Text games such as MUD set the stage for the "cambrian explosion" of graphical worlds during the early proliferation of the internet.[8] Though the original Multi-User Dungeon (like most games at the time) was an adventure game, networked gameplay took a decidedly social bent as the user base diversified. MUDs touting names such as TinyMUD[9] and LambdaMOO[10] shed the fantasy trope and the goal- or combat-oriented gameplay—people started logging on just to hang out.[11]

Habitat, a game created by Lucasfilm in the 1980s, thrust the social virtual world into the modern era. The key development was the graphical user interface. The on-screen agent, referred to as an "avatar," was a cartoonish figure that the user navigated through a series of single-screen regions.[12] The user manipulated her avatar in a point-and-click fashion using a joystick controller; she spoke to other avatars through on-screen text balloons; she regarded the world and her binary-self-incarnate not as a story to be read but as a full-color motion picture.[13]

The Habitat experience was initially formulated as a series of traditional, goal-oriented mini-games. But these often required a considerably larger amount of effort to construct than the community spent completing them. To wit, early in the game's history the developers endeavored to create an involved treasure hunt, which required hours of design, days of coordination, and extensive programming to implement. It was solved in a mere eight hours by a user who stumbled across the key clue in the first fifteen minutes.[14] This and other similar creations were community-wide, collabo-

7. *Id.* at 38–39.

8. Bruce Damer, *Meeting in the Ether: A Brief History of Virtual Worlds as a Medium for User-Created Events*, 1 J. VIRTUAL WORLDS RES., no. 1, July 2008, at 1–2, http://journals.tdl.org/jvwr/article/view/285/239; TOM BOELLSTORFF, COMING OF AGE IN SECOND LIFE: AN ANTHROPOLOGIST EXPLORES THE VIRTUALLY HUMAN 51 (2008).

9. The acronym MUD, while at first representative of the game itself, became a moniker used for the class of text-based games that evolved as their use became more widespread and users developed variants to accommodate differing styles of play. Other related derivatives included MUSHes, MOOs, and MUCKs. *See* LASTOWKA, *supra* note 5, at 40–41. One iteration, ElseMOO, was modeled after a suburban Minnesota town; there were no objective goals beyond the recreation of a moderate and "genteel" community. *Id.*

10. *Id.*

11. BOELLSTORFF, *supra* note 8, at 50–52.

12. Damer, *supra* note 8, at 4.

13. *See* Chip Morningstar & F. Randall Farmer, *The Lessons of Lucasfilm's Habitat*, 1 J. VIRTUAL WORLDS RES., no. 1, July 2008, at 1, 3, http://journals.tdl.org/jvwr/article/view/287/241. Actual usage figures amounted to around several thousand concurrent users. LASTOWKA, *supra* note 5, at 44.

14. *See* Morningstar & Farmer, *supra* note 13, at 12 (explaining that the Habitat developers thought the first goal-directed event would occupy players for days).

rative activities, which meant that once the puzzle was solved by one user, it was solved for all users. The developers simply could not create content fast enough to satisfy the players' demand, which led them to abandon a top-down approach to content creation and to "let the players themselves drive the direction of the design."[15] The abandonment of the creator-consumer diametric leveled—if only symbolically—the asymmetric relationship between the developers and the users. In effect, the developers voluntarily relinquished control over what had historically been outside the province of the ordinary user. Consequently, users were encouraged to design; so too were they encouraged to own.

The combination of a graphical self-representation and an immersive, quasi-real environment involving, *inter alia*, elements of community, politics, and entertainment afforded users a greater connection to the virtual world, the community therein, and ultimately to their personal avatar. Demonstrative language norms developed such as the use of "you" and "I" in reference to an avatar rather than the person controlling it.[16] A growing user base and the community-based content development model fostered a complex society to which users—having recently adopted a synonymic relationship with their avatars—became increasingly devoted.

In its final form, Habitat featured a virtual economy and a community with myriad aspirations. Social groups, churches, and user-created minigames were developed;[17] avatars held in-world debates over questions such as the legality of virtual murder;[18] and the developers actively nurtured the community by engaging the users and responding with new facets to the game, new rules, or new capabilities as needed.[19] This led to interesting results, such as the election of a town sheriff—a well-respected, though ambiguously defined member of the society who was to be programmatically endowed with powers that users had chosen by a referendum.[20] Yet beyond the spectacle of dynamic social evolution within a fledgling community, something else had transpired: the game, it would seem, had ceased to be just a game.

During a technology conference nearly a decade after the rise and fall of the Habitat world, the Lucasfilm developers cynically reflected on the experience: "a special circle of living Hell awaits the implementors [sic] of systems involving that most important category of autonomous computational agents of all, groups of interacting human beings."[21] Appropriately, Habitat marked the genesis of the present trend in social virtual worlds:

15. *Id.*

16. *See* LASTOWKA, *supra* note 5, at 45–46.

17. *Id.* at 43–44.

18. Morningstar & Farmer, *supra* note 13, at 13.

19. *See id.* at 14 (noting that, initially, "[t]he Sheriff was nothing but a figurehead.").

20. *Id.* at 13. The pilot program ended before the Sheriff could be imbued with those powers decided upon by the community. *Id.*

21. Morningstar & Farmer, *supra* note 13, at 10.

users are granted varying degrees of control over a persistent environment and hence over the experiences of their peers. Although computer technology would change in ways the Lucasfilm pioneers could not imagine over the decades that followed the technology conference, their observations about human interaction in the virtual world were eerily prescient.

Today, that trend has expanded considerably: now an estimated twenty to thirty million individuals worldwide engage virtual communities—whether based on role play, combat, or community—an average of twenty-two hours each week.[22] The popularity of virtual worlds has enticed politicians to invest in virtual campaigns,[23] has produced virtual land barons with virtual assets worth real cash millions,[24] and has provided legal professionals (including Judge Richard Posner of the 7th Circuit) a place to reach out to the digital agents of real-life clients and colleagues.[25] These examples are merely a few of the many ways the real-world has become increasingly invested in the virtual worlds.

II. WHAT THE HELL IS A VIRTUAL WORLD?

> *Behold! Human beings living in an underground den, which has a mouth open toward the light and reaching all along the den; here they have been from their childhood, and have their legs and necks chained so that they cannot move, and can only see before them . . . behind them a fire is blazing at a distance . . . and you will see, if you look, a low wall . . . like the screen which marionette-players have in front of them, over which they show the puppets . . . . They see only their own shadows, or the shadows of one another, which the fire throws on the opposite wall of the cave.*
>
> Plato's Allegory of the Cave[26]

The popularized concept of the virtual world as we know it today has its genesis in Neal Stephenson's science fiction novel, *Snow Crash*.[27] In the book, the *metaverse* is the virtual frontier of the modern internet—a three-dimensional immersive world; a second existence for humanity; a respite from what was left of a corrupt, corporate, and fragmented world. It is the fictional successor to the worldwide computer network many of us use on a

22. Jack M. Balkin & Beth Simone Noveck, *Introduction*, *in* THE STATE OF PLAY: LAW, GAMES, AND VIRTUAL WORLDS 3 (Jack M. Balkin & Beth Simone Noveck eds., 2006).

23. *See generally* Annabel Jane Wharton, *Shaping the 'Public Sphere' in Second Life: Architectures of the 2008 Presidential*, 2 J. VIRTUAL WORLDS RES., no. 2, Aug. 2009, at 1, 1, https://journals.tdl.org/jvwr/article/view/411/491 (discussing the use of Second Life as campaign mechanisms for both the Republican and Democratic political parties in the 2008 presidential election).

24. Jessica Bennett, *Why Millions Are Living Virtual Lives Online*, NEWSWEEK, July 29, 2007, http://www.thedailybeast.com/newsweek/2007/07/29/alternate-universe.html.

25. *See* Terry Carter, Stephanie Francis Ward & Rachel M. Zahorsky, *Legal Rebels: Riding Solo Homegrown Virtual Practice*, 96 A.B.A. J. 38, 38 (2010); John Bringardner, *Law Firms Open Virtual Offices for Offline Profit*, EDISCOVERY: TECH. & L., Feb. 2007, at 5.

26. PLATO, THE REPUBLIC 253–54 (B. Jowett trans., Random House 1960).

27. NEAL STEPHENSON, SNOW CRASH (1992).

daily basis. Within the metaverse, humans interact with each other via avatars that they connect to through public or private computer terminals. Social status is demonstrated by technical acumen[28] and the appearance of sophistication. Although the world Stephenson envisioned was advanced far beyond our present technological capacity, the ideal has, regardless, taken hold.

But what exactly is a virtual world? Familiars might reference modern cinema (blockbuster hits such as *The Matrix*[29]) or video games. These comparisons often impart to the users an element of negative social stigma. Proponents of virtual world legitimacy, on the other hand, often quote Auden:

> [M]an is a history and culture making creature, who by his own efforts has been able to change himself after his biological evolution was complete. Each of us, therefore, has acquired what we call a 'second nature', created by the particular society and culture into which we happen to have been born.[30]

A. Virtual Worlds Today

To paint in broad strokes, virtual worlds may generally be defined as "a place described by words or projected through pictures which create a space in the imagination, real enough that you can feel you are inside of it."[31] Whether Plato's cave[32] or Shakespeare's *Othello*, whether words or text, an element of the virtual is imaginative freedom—"[f]reedom to do, to be, to realize."[33] Adapted to suit the evolution of virtual worlds beyond those created in fiction and folklore, the modern iteration constitutes a "synchronous, persistent network of people, represented as avatars, [and] facilitated by networked computers."[34] In other words, a virtual world is an

28. That is, one's raw ability to control an avatar in a realistic manner, or to interact with the virtual world itself by creating, manipulating, or defying its core structural elements. In a sense, such reverence is not unlike that which we attribute to professional actors, athletes, or writers. *See id.* at 61.

29. THE MATRIX (Warner Bros. Pictures *in association with* Village Roadshow Pictures, Groucho II Film Partnership, *and* Silver Pictures 1999).

30. WYSTAN HUGH AUDEN, *Words and the Word*, *in* SECONDARY WORLDS: ESSAYS BY W.H. AUDEN 119 (1968).

31. Damer, *supra* note 8, at 2; *see also* Norberto Nuno Gomes de Andrade, *Striking a Balance Between Property and Personality: The Case of the Avatars*, 1 J.VIRTUAL WORLDS RES., no. 3, Feb. 2009, at 1, 12, http://journals.tdl.org/jvwr/index.php/jvwr/article/view/362/423 ("[V]irtual worlds can be technically defined as shared, persistent, dynamic and representational computer-generated environments that allow players to interact with each other and engage in a wide range of activities through the control and manipulation of a given character/interface - the avatar.").

32. PLATO, *supra* note 26, at 253–54.

33. Richard A. Bartle, *Virtual Worldliness*, *in* THE STATE OF PLAY: LAW, GAMES, AND VIRTUAL WORLDS, *supra* note 22, at 33.

34. Jeremiah Spence, *Demographics of Virtual Worlds*, 1 J. VIRTUAL WORLDS RES., no. 2, Nov. 2008, at 1, 3, http://journals.tdl.org/jvwr/article/view/360/272 (quoting Mark W. Bell, *To-*

independent and persistent space in which users represented by graphical or textual surrogates interact in real time.

There are currently hundreds of virtual worlds encompassing a broad variety of genres and serving a highly diverse user base. Some virtual worlds are geared only toward children, some toward adults; there are worlds where one can play the role of a human warrior entrenched in a centuries-old war against orcs[35] or aliens;[36] some host people living as professional farmers,[37] kings,[38] and fashionistas;[39] some boast users numbering in the hundreds, some in the millions. Despite mainstream society's penchant for placative descriptors,[40] virtual worlds do have many real-world applications in professional fields such as education, business, and health.[41] As the internet grows in popularity and accessibility, the number and diversity of these worlds continues to increase. Two of the most popular contemporary virtual worlds, World of Warcraft and Second Life, occupy polar ends of the subject matter spectrum; the former falling within the class of manifestly goal-oriented worlds, and the latter representing socially-oriented worlds devoid of any specific architecture for objective progress.

In World of Warcraft the user plays the role of a warrior tracing a common theme of battle against other users and computer-generated monsters. The goal is simple: gain experience, amass gold, collect powerful instruments of warfare, and meet a series of predefined objectives. The user wins upon satisfaction of these objectives. 'Beating the game' does not,

---

wards a Definition of "Virtual Worlds", 1 J. VIRTUAL WORLDS RES., no. 1, Nov. 2008 at 1, 2, http://journals.tdl.org/jvwr/index.php/jvwr/article/view/283/237).

35. WORLD OF WARCRAFT, *supra* note 2.

36. ALIENS VERSUS PREDATOR (Fox Interactive 1999).

37. WORLD OF WARCRAFT, *supra* note 2.

38. ULTIMA ONLINE, *supra* note 2; ENTROPIA UNIVERSE (MindArk 2003).

39. *See* Stéphane Kieger, *An Exploration of Entrepreneurship in Massively Multiplayer Online Role-Playing Games: Second Life and Entropia Universe*, 2 J. VIRTUAL WORLDS RES., no. 4, Feb. 2010, at 10, 14, http://journals.tdl.org/jvwr/index.php/jvwr/article/view/643/623. Kieger's paper details the author's thorough empirical research into the viability of virtual world entrepreneurship in Second Life and Entropia Universe, focusing on the for-profit ventures of a select group of users operating in each virtual world. Although the author sidesteps the rather important issue of overall economic strength with a few curt allusions to "expansion" and "growth," he concludes that three predicates to entrepreneurial viability are present: (1) willing investors, (2) new technology presenting new revenue opportunities, and (3) a growing market that is well-understood by the entrepreneurs. *Id.* at 21.

40. *See* Nick Yee, *The Demographics, Motivations, and Derived Experiences of Users of Massively Multi-User Online Graphical Environments*, 15 PRESENCE: TELEOPERATORS & VIRTUAL ENV'T, no. 3, 309, 317 (2006) ("[S]cenic chat room[s] with a variety of interactive tasks.").

41. *See, e.g.*, David Kurt Herold, *Virtual Education: Teaching Media Studies in Second Life*, 2 J. VIRTUAL WORLDS RES., no. 1, Apr. 2009, at 1, 9, http://journals.tdl.org/jvwr/index.php/jvwr/article/view/380/454 (discussing the value of virtual worlds in education); *see also* Maria Toro-Troconis & Maged N. Kamel Boulos, *Musings on the State of '3-D Virtual Worlds for Health and Healthcare' in 2009*, 2 J. VIRTUAL WORLDS RES., no. 2, Aug. 2009, at 1, 10, http://journals.tdl.org/jvwr/index.php/jvwr/article/view/629 (discussing the present and future role of virtual worlds in education and healthcare).

however, signify a terminus. Instead, the user simply starts over with the spoils collected on the battlefield for use against tougher, better-equipped foes. The primary objectives remain consistent, but the purpose of multiple victories becomes self-improvement rather than goal achievement.

Second Life, on the other hand, cannot be so easily defined. The platform imparts a staggering level of freedom on the user, and there are no explicit directives as to how one must advance within the game. Indeed, there are no 'levels' or goals to be found, just a bazaar of user-generated trinkets and digital real property, some of it like-real and some of it unreal.[42] As was the case with Habitat, Linden Lab purposefully entreats the user to create and design such that her own contributions to the virtual world shape not only her unique experience but that of those around her as well. This approach is consistent with that which early virtual world developers used to resolve the experiential impediment that the asymmetric user-developer relationship imposes on purely social worlds: namely, a creative capacity incompetent to satisfy a sizeable user population.

Though the two platforms share many key elements, such as persistence and immediacy, the free-form nature of social worlds essentially replaces concrete objectives with a freedom to design. As such, the user is vested with nearly-unlimited control over the way she relates to the world. The vast majority of users devote their creative efforts toward the task of customizing their representative agent; or, in other words, designing a fashionable avatar. Because avatars, too, face real-world prejudice.[43]

B. The Social Avatar

The evolution of the user avatar from an agent into a surrogate is an important cornerstone in the contemporary movement for the expansion of virtual rights. A user's willingness to identify with her virtual world persona highlights an important and fundamental motivation to demand, for example, a virtual property rights regime.

The emergence of the avatar into mainstream use was widely tied to the success of the computer entertainment industry.[44] An avatar was initially just a user's representative image—"you" were the Mario character on the television screen or the video pong paddle. Physical empathy toward even rudimentary avatars is evident in the way people sway, duck, lean, and even panic while playing a game. When customization possibilities grew in complexity, the avatar became more than just an agent, thus "enabling . . . consumers to playfully engage in symbolic avatar creation and experience

42. "Sandbox" is a colloquial term used to describe an in-game design studio with which users can create persistent objects such as clothing or home decorum, that become semi-permanent based on the users' influence.

43. BOELLSTORFF, *supra* note 8, at 130 (noting that avatars, like humans, are judged by their appearance).

44. *See* LASTOWKA, *supra* note 5, at 44.

different bodily selves."[45] Therefore they developed "proprietary feeling[s]" toward their avatars due to users experiencing symbolic disembodiment. It is a freedom to be who you want to be and do things you couldn't otherwise do in reality.[46]

The word "avatar," derived from Sanskrit,[47] generally refers to the deliberate descent of a deity—typically the Hindu god Vishnu—from heaven to earth but translates literally to "appearance" or "manifestation."[48] The word connotes a spiritual transmission from the heavens (the virtual) to the earth (the actual): the deity becomes real. Yet in its common contemporary usage the transmission occurs in reverse, from the actual to the virtual. The user becomes unreal.[49] Understandably, the simultaneous deification and abstraction of the user does have its allure. Indeed, the transcendence from user to avatar—the lines of binary code that signify the user/avatar presence in a virtual world—is eerily similar to the Hindu corollary.[50] Through their avatars, users of the virtual world can teleport, fly, communicate telepathically, manifest objects, and transform (among other things). A slender and satin-haired female one minute, a gigantic violet-colored squirrel the next.[51]

Despite a seemingly limitless virtual existence, users exhibit a variety of socially entrenched real-world behavioral norms. For example, avatars stand close to one another when they "talk" despite the fact that physical proximity is unnecessary to affect a conversation.[52] Homes in virtual worlds have kitchens and bathrooms even though avatars do not eat and hence cannot digest or excrete. There are taverns and night clubs that serve—and charge money for—alcoholic beverages. Indeed, real-world society informs many aspects of virtual society, but it cannot itself explain virtual society. The real is merely a reference point from which virtual world users develop unique identities and experiences. It is an existence shaped as much by the spaces they come to inhabit as it is by the places they escape.[53]

---

45. Handan Vicdan & Ebru Ulusoy, *Symbolic and Experiential Consumption of Body in Virtual Worlds: From (Dis)Embodiment to Sysmembodiment*, 1 J. VIRTUAL WORLDS RES., no. 2, Nov. 2008, at 1, 10, http://journals.tdl.org/jvwr/article/download/347/257.

46. *Id.* at 15; *see* BOELLSTORFF, *supra* note 8, at 129 ("What happens to it happens to them. What touches it, they feel . . . .") (quoting MYRON W. KRUEGER, ARTIFICIAL REALITY 127–28 (1983)).

47. Avatara (Sanskrit) or अवतार (Devangari). See FREDA MATCHETT, KRSNA, LORD OR AVATARA?: THE RELATIONSHIP BETWEEN KRSNA AND VISNU 4 (2001), for further reading on the origins of the word and its significance in Hindu mythology.

48. MATCHETT, *supra* note 47, at 4; BOELLSTORFF, *supra* note 8, at 128–29.

49. *See* BOELLSTORFF, *supra* note 8, at 128.

50. *See id.*

51. *See* Delia Dumitrica & Georgia Gaden, *Knee-High Boots and Six-Pack Abs: Autoethnographic Reflections on Gender and Technology in Second Life*, 1 J. VIRTUAL WORLDS RES., no. 3, Feb. 2009, at 4, 10, https://journals.tdl.org/jvwr/article/view/323/422 (discussing gender bending in Second Life).

52. LASTOWKA, *supra* note 5, at 45.

53. *See* BOELLSTORFF, *supra* note 8, at 63. But, for an inapposite viewpoint, see Lori Landay, *Having But Not Holding: Consumerism & Commodification in Second Life*, 1 J. VIRTUAL WORLDS

While in the real-world, the body is a fundamental mechanism of communication with others. Lacking any corresponding essential function, the body in the virtual world becomes an end in itself. And it is infinitely malleable. The act of purchasing "skins"[54] or collecting an array of flamboyant hairstyles are examples of the

> immersive experience of constructing and reconstructing one's selves, therefore indicating the experiencing of the body for the sake of the body, and less of a purposeful signification of the body to convey a meaning or an impression to others. In other words, the role of the body is transformed from a means to communicate or signify impression to an end in that the body itself becomes the experience.[55]

User control over the appearance of an avatar imparts the ability to craft an ideal self. Users lavish great amounts of time and money into developing one—if not multiple—virtual identities.[56] The effective level of control the user has over the avatar appearance leaves little room for chance physical characteristics. Still, people have a tendency to create avatars that are similar in appearance to their real-life selves.[57] They often, however, omit or replace self-perceived physical deficiencies.[58] These upgrades are generally minimal enough for a person to maintain self-reflexivity, but significant enough to imbue a sense of self-confidence: a frame just a little taller, a form just a little slimmer, arms just a little stronger, eyes just a little bluer.[59]

Some users diverge significantly from their true appearance and design avatars that fit with a personal fantasy interest: gender bending, medieval role playing, and dressing up in animal skin all typify relatively common

---

RES., no. 2, Nov. 2008, at 1, 2, http://journals.tdl.org/jvwr/article/viewFile/355/265. In a somewhat biased article, Landay notes that metaphor drives the creative experience, and suggests that users' real-world interests will inform in-world behavior to a greater degree than Boellstorff suggests. *Id.* at 3.

54. "Skins" are essentially new physical appearances available for purchase in some virtual worlds. A skin might change only the physical appearance of the body itself, or include clothing or other personal effects such as weapons, or a hat.

55. Vicdan & Ulusoy, *supra* note 45, at 13.

56. *See* BOELLSTORFF, *supra* note 8, at 129.

57. *See id.* at 129–30.

58. *Id.*

59. *See* Vicdan & Ulusoy, *supra* note 45, at 13–15. "With [Second Life], presentation of the self is enhanced by immersion into SL experiences, which take the form of symbolic construction and reconstruction of bodily selves through the semiotic scheme of the virtual worlds. Consumers are enabled to playfully immerse into life experiences and experiment with these lived moments through their multiple avatars." *Id.* at 15. *See also* Enrique P. Becerra & Mary Ann Stutts, *Ugly Duckling by Day, Supermodel by Night: The Influence of Body Image on the Use of Virtual Worlds*, 1 J. VIRTUAL WORLDS RES., no. 2, Nov. 2008, at 1, 5–6, 12–13, http://journals.tdl.org/jvwr/article/view/346/254 (concluding that an inverse relationship exists between body image and the desire to become somebody else, which in turn is positively correlated with a propensity to use virtual worlds).

virtual pastimes.[60] Attendant to a user's mastery of the art of avatar manipulation and interaction follows a presumption that the user has developed both an attachment to the virtual world and her agent in that world. It stands to reason that at this point the once-divergent selves begin to overlap, and the user begins to identify not just with, but *as* the avatar she has created. And such as it is in the real-world, meaningful identification with an item of personal significance fosters sentiments such as a sense of entitlement, a desire for respect, and a need for protection.

Ralph Koster, a renowned virtual world designer, theorized the basis for these basic needs in his oft-cited manuscript, *A Declaration of the Rights of Avatars*,[61] which was written more than a decade ago. The text itself was based on sequences from the Bill of Rights and the Declaration of the Rights of Man, thus implying an indelible emotional connection between the human and the avatar.[62] Interestingly, however, Koster specifically vests the protection of rights in the avatar as a separate entity from, rather than an extension of, the user: among the foremost of these is "the right to be treated as people and not as disembodied, meaningless, soulless puppets. Inherent in this right are therefore the natural and inalienable rights of man."[63] Although the document was more a thought exercise than a true position statement, it has taken on significance amongst virtual world enthusiasts. And at the very least, it elucidates the potential depth of investment in their virtual manifestations.

C. Who Plays, and Why?

The allure of virtual worlds is as broad as the imagination of the user. Social virtual worlds, being the most open ended, encompass most of the benefits of other more genre-specific games. While a traditional objective-oriented game will generally contain a storyline targeted toward a specific user interest, a purely social world like Second Life offers the opportunity to not only engage a broader community of users and a variety of activities, but to do many of the same activities that typical games offer.[64] All virtual worlds, however, provide a visual social network in which users can engage

60. *See* Yee, *supra* note 40, at 311.

61. For a copy of the declaration, see RALPH KOSTER, A DECLARATION OF THE RIGHTS OF AVATARS (2000), *in* PETER LUDLOW & MARK WALLACE, THE SECOND LIFE HERALD 269, 269–73 (2007).

62. *See id.*

63. *Id.* at 270.

64. In many social virtual worlds users are free to design and implement different kinds of "mini games." For instance, although Second Life is not a platform designed around the idea of "killing" other users, this type of use has been created and used in a variety of settings. *See* Tjarda Sixma, *The Gorean Community in Second Life: Rules of Sexual Inspired Role-Play*, 1 J. VIRTUAL WORLDS RES., no. 3, Feb. 2009, at 3, 13, http://journals.tdl.org/jvwr/index.php/jvwr/article/view/330/436 (discussing Gor, one of the most prolific roleplaying communities in Second Life, as an example of a community with specific fighting rules and conditions that must be met in order to record a "kill").

their friends, spouses, and families as well as contribute to the world by creating permanent items for others to use.[65] Whether the world involves dancing at night clubs or sword fighting werewolves is immaterial in this respect. Independent of any specific content, any virtual world can serve as a meeting place for businesses or a getaway for romantic partners; it can be used in rehabilitative health services or implemented in educational support and alternative teacher education programs.[66] What virtual worlds are not is exclusive to any specific class of persons.

Those participating in virtual worlds hail from a wide variety of social spheres and a diverse range of economic backgrounds.[67] Half of all active users are employed full-time; one quarter consists of full-time students; and the other quarter constitutes part-time students, part-time employees, or unemployed persons.[68] More than eighty percent of the user base for online virtual worlds is male, the average user age is between twenty-six and twenty-seven, and the average amount of time a user spends in-world is over twenty hours each week.[69]

But what motivates users to spend half as much time in front of their computer as the average person spends at a real-life job each week? Since the early development of virtual worlds, researchers and developers have observed four general categories of user-types characterized by specific motivations to play: achievers, explorers, socializers, and killers.[70] Achievers set out to accomplish goals and win the game; explorers test the boundaries of the game environment and explore the world; socializers participate in different social groups and develop relationships with others; and killers seek out ways to dominate other users.[71] A recent study conducted over three years and across a broad range of virtual worlds isolated user motivations into five core categories: relationships, manipulation, immersion, escapism, and achievement.[72]

The study revealed a few particularly interesting (and at least as many predictable) features of the virtual world culture. Relationships and social intimacy ranked highest as a primary motivational factor among both male

65. *See generally* Paul R. Messinger, Eleni Stroulia, & Kelly Lyons, *A Typology of Virtual Worlds: Historical Overview and Future Directions*, 1 J. VIRTUAL WORLDS RES., no. 1, July 2008, at 1, http://journals.tdl.org/jvwr/article/view/291/245 (discussing how virtual worlds constitute a growing and complex space).

66. The Journal of Virtual Worlds Research published two issues, entitled "Pedagogy, Education and Innovation in 3-D Virtual Worlds" and "3d Virtual Worlds for Health and Healthcare," that gave extensive treatment to the ongoing health and education innovations recently explored. The issues are published in full at http://jvwresearch.org/ (hover over the "Past Issues" button at the top of the page).

67. *See* Kieger, *supra* note 39, at 12–13.

68. *See* Yee, *supra* note 40, at 315–17 (discussing the demographics of virtual worlds).

69. *See id.* (providing additional information regarding the demographics of virtual worlds).

70. LASTOWKA, *supra* note 5, at 58.

71. *Id.* Colloquially, to 'pwn.'

72. Yee, *supra* note 40, at 309.

and female users. On the other hand, manipulation—a category encompassing activities such as the development of virtual chattels to sell in the virtual world—was the least important motivational factor among the users studied. Interestingly, user age was found to be inversely proportional to the user's interest in manipulation.[73] In other words, as a user grows older her interest in manipulating the world declines. Though participation in virtual worlds decreased in the higher age ranges, the study found a consistently high degree of emotional investment among all users. In many cases, experiences and relationships occurring within a virtual world were *at least as important* to users as those they maintained in real life.[74]

Similarly, for some users the prospect of tapping into a robust virtual marketplace for profit is a strong motivation for participating in a virtual world. Journalist Julian Dibbell, for instance, maintained a living-wage-level income by playing the fantasy combat title, Ultima Online.[75] Dibbell collected weapons, armor, and other virtual valuables that he received during gameplay and sold them to other users on eBay.[76] This formula is not unique:[77] there are many whose sole income is founded in virtual world commerce and by a variety of means. Yet a closer examination of a representative virtual economy—that of Second Life—reveals that an income interest is nowhere near the predominant motivation driving users to participate in the virtual marketplace.[78] Rather, the majority of Second Life users seek (exclusively in most cases) enhancements that enrich the virtual world experience; for example, platform or avatar add-ons.[79]

D. Virtual Economies; Cold Hard Cash

Although not all virtual world providers sanction or facilitate the exchange of virtual assets for real money, the practice is widespread. As one would imagine, virtual worlds with a legitimate market economy exhibit many of the same features found in real-life marketplaces: wholesalers, spe-

73. *Id.* at 320.

74. *Id.* at 323–24.

75. Ultima Online is a fantasy combat simulation that predates World of Warcraft by more than a decade. The principles underlying the game are similar, though the particular cast and lore varies considerably.

76. *See generally* JULIAN DIBBELL, PLAY MONEY (2006) (illustrating how Dibbell quit his day job and made millions trading virtual items). The conduct of selling virtual items is now forbidden on eBay and other similar websites, and software companies whose user agreements specifically forbid the sale of virtual items for monetary value have supported increasing enforcement of these prohibitions. *See* discussion *infra* Part III-3.

77. *See generally* Anthony Gilmore, *China's New Gold Farm*, 2 J. VIRTUAL WORLDS RES., no. 4, Feb. 2010, at 3, http://journals.tdl.org/jvwr/index.php/jvwr/article/view/863/628 (providing a brief report and photo essay that depicts one of the many gold farms operating in China).

78. *See* discussion *infra* Part IV-1; *but see generally* Kieger, *supra* note 39 (discussing entrepreneurial viability in virtual worlds and indirectly assuming that virtual world economies are growing).

79. *See* discussion *supra* Part II-2.

cialty outfits, personalized services, and the like. Similarly, sales activities range from intermittent dabbling to full-time dealing; the subject commodities can be anything from virtual chattels to virtual property and more. Indeed, the sale of entire accounts as a quasi-prefab commodity is quite common. World of Warcraft characters, for example, can be found online at prices reaching into the thousands of dollars.[80] These sorts of transactions occur in social worlds as well, which suggests that such account purchases are not valued solely on the objective advantage of better equipment or refined skill sets.

The most common transaction between users is a typical gray market (or black market) exchange. They are often facilitated by a third party such as an auction website or a special-interest message board.[81] Users browse third-party listings in the same manner as one might peruse the classified ads for a used toaster oven. When she selects an item she can usually initiate an electronic transfer of funds, after which the buyer and the seller meet within the virtual world to affect the transfer of the merchandise. As previously noted, the sale of second-hand virtual chattels can be a lucrative business for those who are able to obtain sought-after items. Alternatively, where a virtual economy is actively facilitated by a game developer, users can actually set up an in-world storefront and run a highly organized sales operation. Theoretically, the items for sale could be identical to those in the preceding example, but the process is akin to a simple file transfer and thus far less prone to exploitation.[82]

Of the virtual worlds that entice users with a cash-equivalent economy, Second Life remains one of the most widely used. Linden Lab supports the Second Life economy by providing an online monetary exchange. The LindeX, as it is called, traded at a rate of approximately L$260 to one U.S. dollar between 2009 and 2010.[83] Entropy Universe, another popular platform of the science fiction genre, boasts a ten-to-one fixed exchange rate

80. This figure was retrieved on an account sales website, www.accountsdirect.com. The site features listings of avatars from a large number of games and provides similar service guarantees and technical support (complete with the photograph of an attractive female account representative) to other online retailers such as Amazon or Newegg.

81. *See, e.g.*, GUILD BANK - WOW WORLD OF WARCRAFT ITEMS FOR SALE, http://www.guild-bank.com (last visited Mar. 31, 2013).

82. The mechanics underlying the transfer of a virtual chattel often require the seller to drop the item so that the buyer can pick it up. For the duration of time between the seller's act of dropping the item and the buyer's act of picking it up a number of obvious risks are presented: first, a third party may interrupt the exchange and "steal" the item; second, the buyer may disconnect from the virtual world, rendering the item vulnerable to passersby; and third, the seller may simply reclaim the item and leave the game.

83. Nelson Linden, *The Second Life Economy in Q4 2010*, SECOND LIFE BLOG (Jan. 26, 2011, 12:30 PM), http://community.secondlife.com/t5/Featured-News/The-Second-Life-Economy-in-Q4-2010/ba-p/674618.

between the in-world currency and U.S. dollars.[84] To date, these and other virtual economies have produced a millionaire land-baroness,[85] a digital-pornography mogul,[86] virtual-turned-real fashion designers,[87] art critics, and hundreds of other hobbyist-entrepreneurs looking to make a few dollars. Though genuine, such levels of success are uncommon; the average peddler of virtual wares occupies the superlative middle-income class.

As a means to facilitate commerce and creativity, the Second Life interface[88] offers a design "sandbox" (not unlike a package of Legos®) with which users can build persistent content from a series of preset modules.[89] Since the world's conception, Linden Lab has actively publicized its intent to vest users with intellectual property rights to the content they create. These rights are largely identical to property rights existing in real items: owners have the right to exclude, the right to manipulate or alter, the right to prevent manipulation, the right to sell or transfer the property, and so on.[90] Thus a user can introduce the content she creates into the virtual marketplace as a sale for profit. Ultimately it is the fiscally minded user that most benefits from the developer's recognition of virtual property rights. Judicial enforcement of these entitlements would, ostensibly, further that particular interest as game developers possess only a limited capacity to maintain and enforce the rights they purport to vest in the user.

Irrespective of the for-profit activity within a virtual world, however, the purposeful maintenance of a legitimate connection to an external legal economy invites the spectre of claims under law. The majority of the legal claims that arise out of virtual world conduct involve the exchange or use of virtual goods.[91] Such claims currently have the most tenable connection to the existing body of law and typically sound under one of three principal legal theories: contract, property, or intellectual property. Contract claims are common to most all virtual worlds in which goods are exchanged for money, while property and intellectual property claims arise more often in

84. Oliver Chiang, *Meet The Man Who Paid A Record $335,000 For Virtual Property*, FORBES BLOGS: SELECTSTART (Nov. 17, 2010, 8:00 PM), http://blogs.forbes.com/oliverchiang/2010/11/17/meet-the-man-who-paid-a-record-335000-for-virtual-property/.

85. *See* Robert D. Hof, *My Virtual Life*, BUSINESSWEEK, Apr. 30, 2006, *available at* http://www.businessweek.com/magazine/content/06_18/b3982001.htm; s*ee also* Kurt Hunt, *This Land Is Not Your Land: Second Life, CopyBot, and the Looming Question of Virtual Property Rights*, 9 TEX. R. ENT. & SPORTS L. 141, 143 (2007) (describing how Anshe Chung, the first Second Life land baroness, amassed one million U.S. dollars in virtual land assets).

86. *See* LASTOWKA, *supra* note 5, at 191.

87. *See, e.g.*, Theodore C. Max, *Trademarks in the Veldt: Do Virtual Lawyers Dream of Electric Trademarks?*, 101 TRADEMARK REP. 282, 288 (2011).

88. Or, in other words, the program users execute on their personal computer in order to access the virtual world.

89. *See* Philip Stoup, Note, *The Development and Failure of Social Norms in Second Life*, 58 DUKE L.J. 311, 315–16 (2008).

90. *Id.* at 318–19.

91. *See infra* Parts III-3–5.

the context of official economies and generally test the extent to which such interests have been—or can be—vested in the user.

The present protection regime has, in many ways, failed to protect the rights awarded to users of virtual worlds. Existing Digital Rights Management ("DRM") protections that users can apply to their creations are easily circumvented,[92] and the promises of virtual world providers to protect those creators against violation of intellectual property rights and trademark violations—as will be discussed—have gone largely unaddressed. User interest persists, however, and the potential for profit has attracted more than game developers and computer enthusiasts.

III. Legal Issues & Real Virtual World Responses

I suppose it is tempting, if the only tool you have is a hammer, to treat everything as if it were a nail.

Abraham Maslow[93]

A large number of virtual worlds appeared between Habitat and the present, and the same technological advances—graphics and bandwidth—that facilitated user investment in that particular world, continue to advance. The result has been an increase in independence and a decrease in overt, "centralized control" as the Habitat creators predicted.[94] Second Life is unique among virtual worlds insofar as it purports to grant users ownership in virtual chattels.[95] Users are encouraged to create and to buy everything from wardrobe accoutrements to user scripts,[96] from hairstyles to parcels of land. From the early stages of Second Life development, Linden Research CEO Philip Rosedale couched his discussion of virtual land in terms of private ownership,[97] and Linden Lab issued press releases proclaiming the grant of intellectual property rights to users.[98] Yet in many ways this was an empty promise. In Second Life, and in other virtual worlds, the protection of rights that developers conferred to users of their virtual worlds has been far from a priority.

---

92. Hunt, *supra* note 85, at 147–48.

93. Abraham H. Maslow, The Psychology of Science: A Reconnaissance 15–16 (First Gateway ed. 1969).

94. *See* Morningstar & Farmer, *supra* note 13, at 18 ("We advocate an agoric, evolutionary approach to world building rather than a centralized, socialistic one.").

95. *Terms of Service*, Second Life (Dec. 15, 2010), http://secondlife.com/corporate/tos.php.

96. A user script might, for example, allow an avatar to fly higher than the game allows by default or augment the actions an avatar can perform. *See* Benjamin Tyson Duranske, Virtual Law: Navigating the Legal Landscape of Virtual Worlds 251 (2008).

97. Michael Learmonth, *Virtual Real Estate Boom Draws Real Dollars*, USA Today, June 3, 2004, http://www.usatoday.com/tech/webguide/internetlife/2004-06-03-virtual-realty_x.htm.

98. Press Release, Linden Lab, Second Life Residents to Own Digital Creations (Nov. 14, 2003), *available at* http://www.lindenlab.com/releases/second-life-residents-to-own-digital-creations.

A. *Gods and Demigods*

The question of rights within the virtual world has been, for the legal community, a persistent inquiry into precisely who owns what and why.[99] The debate has straddled a number of fields and invoked a variety of legal and social theories.[100] Yet the question remains, at best, incompletely answered.

The earlier discussion of Habitat highlights the looming uncertainty in the relationship between the provider of the world and the users who inhabit it. Habitat was, first and foremost, a creation of the engineers who designed the system and wrote the code. The developers quickly realized that they could not create content to satisfy user consumption, nor could they predict user behavior with enough accuracy to create compelling content.[101] To serve the goals of providing an open-ended world and maintaining user interest, the developers shifted Habitat to a user-driven platform in which the developers served as facilitators rather than overlords.

Given the invitation, the Habitat community became increasingly involved in contributing to the substance of the world—running newspapers, hosting social events, starting businesses[102]—and the experiment took on a markedly more significant meaning.[103] The user content creators assumed a role previously reserved for the developers; thus they were not merely a part of the user class, but they were not entirely a part of the developer class either. The developer maintained dictatorial power over even the most respected contributor. Yet within Habitat, the relatively small size of the community fostered a collegial relationship amongst all parties involved.[104] However, the potential for conflict between users and developers was manifest. Shortly after the time of its creation, developers and scholars began to contemplate the challenges it presented in a system of a much greater scale.[105]

---

99. *See* Gomes de Andrade, *supra* note 31, at 23–24.

100. *See, e.g.*, Edward Castranova, *The Right to Play*, *in* THE STATE OF PLAY: LAW, GAMES, AND VIRTUAL WORLDS, *supra* note 22, at 68, 68–85; James Grimmelmann, *Virtual Power Politics*, *in* THE STATE OF PLAY: LAW, GAMES, AND VIRTUAL WORLDS, *supra* note 22, at 146, 146–57; Gomes de Andrade, *supra* note 31; Jamie J. Kayser, *The New New-World: Virtual Property and the End User License Agreement*, 27 LOY. L.A. ENT. L. REV. 59, 61–62 (2007) (discussing the greater issue of the relationship between user and provider. *See also* Ralph Koster, *Declaring the Rights of Players*, *in* THE STATE OF PLAY: LAW, GAMES, AND VIRTUAL WORLDS, *supra* note 22, at 55, 55–67; Tigran Palyan, *Common Law Privacy in a Not so Common World: Prospects for the Tort of Intrusion upon Seclusion in Virtual Worlds*, 38 SW. L. REV. 167 (2008) (providing examples of specific inquiries that depend on some resolution of the broader relationship issue).

101. *See generally* Morningstar & Farmer, *supra* note 13, at 11–14 (discussing the evolution of Habitat and the ways the developers managed user needs).

102. *See id.* at 11–12.

103. *See id.* at 2 ("[C]yberspace is defined more by the interactions among the actors within it than by the technology with which it is implemented."). *Id.*

104. *Id.* at 12.

105. *Id.*

Second Life is just that: the nearly one million active users and tens of millions of avatars registered to use the system makes Habitat's planned population cap of 50,000[106] look pedestrian in comparison. Modern virtual world developers face all the same problems as those who created Habitat. But these challenges are compounded due to the broad range of participants that inherently differ from the tech-minded and educated users of the nineteen eighties' networked virtual worlds. While the proprietary rights to the code and the network framework upon which the world depends is possessed solely by the developer, the intrinsic value of these worlds arguably falls in the hands of the many users who contribute to its content, whether by creation or participation. But unlike an artist who creates a work that has value dependent only on its preservation, the value of virtual world content is dependent on code. And data does not deteriorate, it is erased.

B. The Fact of Code

Like the artist who determines the boundaries of the world presented by her art, architects of code determine the boundaries—or laws—governing virtual worlds.[107] Virtual property, virtual chattels, avatar clothing, homes, and vehicles—all of these things reside on hard drives hosted by servers owned and maintained by a software company. Even the gamut of behavior an avatar may exhibit is executed according to a set of fundamental algorithmic rules. While some traditional principles of property law—right to possess, to enjoy income from, to alienate[108]—are consistent with notions of virtual property rights, the capacity for a person to truly have an "unrestricted right . . . of use"[109] defies both the nature of the technology and the relationship of the thing to the world in which it exists.

In a lecture given at a computing and technology conference held in 2000, Professor Lawrence Lessig explained that:

> [c]yberspace has an architecture; its code—the software and hardware that defines how cyberspace is—is its architecture. That architecture embeds certain principles; it sets the terms on which one uses the space; it defines what's possible in the space. And these terms and possibilities affect innovation in the space. Some architectures invite innovation; others chill it.[110]

Here, Lessig highlights a point of central importance to the question of law in virtual worlds. In the real-world, people are generally accustomed to

106. *Id.*

107. To simplify the concept for the purposes of this discussion: *code* is the language used to create a virtual world, not dissimilar from an author's prose. *Coding* is the act of construction; writing the novel, so to speak.

108. 63C AM. JUR. 2D. *Property* § 1 (2013).

109. *Id.*

110. Lawrence Lessig, Professor, Harvard Law Sch., The Code in Law, and the Law in Code, Lecture delivered at the pcForum (Aug. 15, 2000) (draft *available at* http://www.stanford.edu/class/msande91si/www-spr04/readings/week3/Lessig-pcforum.pdf).

the fact that the law places restrictions on that which may otherwise be freely performed. Absent any physical encumbrance such as the laws of physics, both the spectrum of action and the various implications of those acts are myriad. The act of firing a weapon, for instance, may be entirely benign under certain circumstances; however, if the weapon is fired into the body of another person, grievous injury or death may result. Thus the impetus to implement law: in order to prevent the commission of acts with objectively negative consequences, we fashion a criminal code.

Consider, on the other hand, a comparable law instituted in a virtual world. Though a user may be able to cause her avatar to pantomime the act of murder, if the program does not allow an avatar to discharge a virtual firearm such that it will strike the body of another avatar, the act that constitutes the crime simply cannot be performed. That an avatar cannot technically die is another matter altogether.

The fact that criminal conduct is possible to commit in the real-world despite a specific prohibition raises the necessity for a deterrent (i.e., prison or fines). In the virtual world no deterrent is required because the act constituting the crime can be summarily excluded from the scope of possible behavior. Similarly, while humans are bound by immutable laws, such as gravity, avatars are bound only by lines of code that recognize no distinction between the laws of physics and the laws of man. And regardless of how closely such laws approximate real legal prohibitions targeting acts that society finds objectionable, code-level law either excludes the performance of a specific act that is otherwise provided for by a broader subset of general acts or fails to provide any instruction as to the act. An example of the former would be to permit the discharge of firearms within a virtual world but remove the ability to do so when the firearm is pointed at an avatar. An example of the latter would be to specifically omit the instruction from the software entirely: if any virtual firearms existed, the function of discharge would be unavailable.

In theory, code can *always* prevent an undesirable act with a sufficient objective definition. If turning while walking was deemed to be undesirable, the act of turning while walking could be programmatically excised. Yet such a broad restriction would inhibit the user experience. Indeed, code-level exclusion of a certain type of conduct might subsequently prevent a wide variety of other desirable acts. For example, a certain variety of exploitative conduct[111] universally regarded as an inherent evil in the real-world was at one point an entirely unrestricted activity in Second Life. Save for the few individuals who consider the virtual depiction of real criminal

111. I refer specifically to conduct commonly known as "age play," in which virtual world users would act out the sexual exploitation of a minor. *See, e.g.*, Burcu Bakioglu, *Spectacular Interventions in Second Life: Goon Culture, Griefing, and Disruption in Virtual Spaces*, 1 J. VIRTUAL WORLDS RES., no. 3, Feb. 2009, at 3, 8, http://journals.tdl.org/jvwr/article/view/348/421.

conduct as a favorable alternative to the actual commission of the same, there was no articulable reason not to proscribe such behavior.[112]

To affect a prohibition, however, would not be as easy as excluding simultaneous walking and turning. Because a necessary condition of the crime involves user-defined parameters (the avatar "skin," or appearance), rather than a mechanism provided for by code, the full elimination of such conduct would exact a heavy burden on the user's freedom to design. The obstacle is not that user skins couldn't be categorized, thus enabling the developer to define and preclude certain interactions between avatars skinned as members of specific age classes; instead, the obstacle to code-level prohibition here lies in the underlying duty to review and designate *every* user skin introduced into the system. If the developers failed, an offender could circumvent the prohibition by creating and using a "minor" avatar skin before administrators defined it to be within the purview of the law.

If absolute, programmatic exclusion of the exploitative conduct was a necessity, only Sophie's choice[113] remained: Linden Lab would be forced either to eliminate the use of user-designed skins and other aspects of the personal aesthetic or omit from basic gameplay the element of physical intimacy to the extent that the underlying, software defined "actions" could be manipulated for unlawful use.[114] In each case, the cost of eliminating the

112. For a more thorough treatment of the issue, see generally Robin Fretwell Wilson, *Sex Play in Virtual Worlds*, 66 WASH. & LEE L. REV. 1127 (2009), which argues that Federal laws intended to prevent the exploitation of minors by internet predators may be applicable to acts undertaken entirely within a virtual world. To wit: an adult who seeks to engage in the prohibited conduct with anonymous users "do so at their own peril" due to the ease with which the intended beneficiary of the law—minors, or children—can circumvent age restrictions. *Id.* at 1174.

113. A necessary decision between two equally unbearable options. *See generally* WILLIAM STYRON, SOPHIE'S CHOICE (1979).

114. The specific mechanics of the code-as-law discussion have been simplified to some extent to serve the interest of clarity. The argument purposefully ignores the fact that the entirety of the Second Life platform is not developer-designed. Though the degree to which user-contributions have augmented the underlying software platform are beyond the specific knowledge (and expertise) of the author, there are a few points worth drawing out.

The fundamental principles of restrictive and permissive prohibition are derived from two common logical operators, "not equal to" (!=) and "equal to" (==). In theory, the difference between the two is a matter of semantics: one person states "that shirt is red" and another states "that shirt is not blue." The significance of this is that in order to prohibit specific conduct the program must be able to determine either (a) the conduct in question is equal to the conduct that is specifically prohibited, or (b) the conduct in question is not equal to any of the conduct that is specifically allowed.

As a general principle, and to use the examples of Second Life and World of Warcraft to illustrate, objective-oriented virtual worlds contain an inherently greater number of rules shaping the user experience. Some examples of this include a restriction on the infliction of harm in certain "safe" areas such as towns, or the inability to kill certain non-player characters such as those that serve to advance the storyline; some character races, too, are limited to certain classes of weaponry and are only able to learn a specific set of "skills."

On the other hand, Second Life imposes no such restrictions and does not tailor the experience in any way. Though killing is not an act specifically programmed into the platform (and thus

abhorrent conduct exhibited by a select minority would distort two hallmarks of the Second Life experience: identity expression/exploration and the development of physical and emotional relationships.

When faced with this dilemma, however, Linden Lab chose not to impose any of the above-mentioned restrictions. Instead, it introduced a clause into the user agreement which forbade the exploitative conduct, thus manifesting a real-world criminal prohibition in the form of a contractual provision.[115] In effect, the developers avoided the summary prevention of undesirable behavior in order to promote user freedom. The specific clause incorporated into the terms of use (now part-and-parcel to the contractual relationship between the user and world provider) acts as a criminal statute carrying a punishment of removal. Interestingly, however, though it does create a right vested entirely in the developer, it does not impose any corresponding obligation.[116]

Though an extreme example, the preceding discussion illustrates just a few of the difficulties that developers face when they must define the limitations of acceptable user conduct. The preference for contract-based, rather than code-based, regulation is a point of interest which demonstrates the developer's commitment to the ideal of free exploration. Moreover, the fact that Linden crafted the provision to target the user in her specific capacity as a contract participant underscores a fundamental discrepancy between the respective interests of users and developers. A user, on the one hand, pursues a vicarious corporeal experience through her avatar and its/her interaction with the virtual world. Increasing emotional investment in the world fosters a proprietary curiosity in her otherworldly existence, and she begins to self-identify not as the human, but as the incarnation. On the other hand, the developer balances two interdependent and conflict-prone interests: its own financial and legal security, and its self-interest in maintaining

---

impossible to do), users are permitted to create add-ons, which augment the functionality of the game. A group of users engaged in a long-standing medieval fantasy created a dueling add-on that displayed a rudimentary life bar which was reduced with each successful blow. There was no stylish animations or professional sound effects—but then, if the users wanted to recreate World of Warcraft they might have an easier time of it just signing up for an account.

Linden Lab's purposeful aversion to obstructing the dynamic evolution of Second Life is, in fact, the greatest hindrance to the circumscription of conduct. Moreover, that users can write their own code and simply plug it into the game means that an objective definition of an objectionable act is prone to needless complication by duplicitous snippets of user code that each define substantially similar conduct. In addition, specific prohibition is also readily avoided by the use of user-developed code that achieves (without detection) a purpose targeted by a prohibition.

115. Wilson, *supra* note 112, at 1137; Robin Linden, *Accusations Regarding Child Pornography in Second Life*, SECOND LIFE BLOG (May 10, 2007, 5:32 AM), http://community.secondlife.com/t5/Features/Accusations-Regarding-Child-Pornography-in-Second-Life/ba-p/575781 (indicating that Linden Lab has a zero tolerance policy for "age play" and will ban users found to be engaging in such conduct).

116. *See Terms of Service*, *supra* note 95, at § 4.3 ("Linden Lab is a service provider and is not responsible or liable for the content, conduct, or services of users or third parties.").

a dynamic virtual world economy while addressing the needs of its users when it can and abating discontent when it cannot.

C. *The User Agreement in Context*

The End-User License Agreement and the Terms of Service ("user agreements") are two types of agreements to which a user is generally required to accede before entering a virtual world. These are generally offered at the time the user installs the client software and/or upon entry into the virtual world.[117] In other words, users are generally afforded no more entitlement and no more protection than the developer chooses. It would be inaccurate to contend that users are wholly unprotected, but the efforts that developers make to ensure user safety usually arise under widespread discontent or necessity. American courts have relied so strongly on these agreements that very few virtual property disputes advance to trial.

One of the most widely discussed cases involving virtual law arose out of a Second Life land auction exploit. An avid user, Marc Bragg, discovered an exploit that allowed him to access virtual property auction webpages before they opened to the general public. Using the exploit, Bragg placed minimum bids on several auctions that were not yet live.[118] The bids went unchallenged (as the auction pages were not searchable) and Bragg won several plots at a bargain price. When Linden discovered Bragg's purchases, it froze his account and "effectively confiscate[ed]" all property and currency he owned in the virtual world.[119] Bragg filed a breach of contract and negligent representation[120] action seeking redress for his losses.[121] Though Bragg alleged that Linden Lab violated his ownership rights in the virtual property by freezing him out of his account, the court resolved the matter at the contract level due to an unenforceable mandatory arbitration provision.[122] Linden reinstated Bragg's account but retained the real estate parcels; the question of the legal status of virtual land went unanswered.

Absent a valid contract defense or cognizable defect, user agreements have generally been upheld as valid in the context of virtual worlds. In a 2010 case, Blizzard Entertainment ("Blizzard") was subject to a lawsuit by MDY Industries ("MDY") for a declaration that Glider, an automation pro-

117. DURANSKE, *supra* note 96, at 27.

118. *See* Bragg v. Linden Research, Inc., 487 F. Supp. 2d 593, 596–97 (E.D. Pa. 2007); LASTOWKA, *supra* note 5, at 17. Bragg discovered that when he manually typed auction addresses into his internet browser, plots that had not opened for bidding and were unavailable by search would, nevertheless, accept user bids.

119. *Bragg*, 487 F. Supp. 2d at 597.

120. Plaintiff's Complaint in Civil Action at 1, Bragg v. Linden Research, Inc., No. CV-7606 (Pa. Ct. C.P. Chester Cnty. Oct. 4, 2006). Though these are the primary causes of action, three others appeared on the complaint. *Id.*

121. For a more in-depth discussion of the claim see LASTOWKA, *supra* note 5, at 17–19.

122. *Bragg*, 487 F. Supp. 2d at 611.

gram (or "bot") it created, did not infringe any of Blizzard's copyrights. Blizzard raised several counterclaims, including copyright infringement, that sought to enjoin further development and sale of Glider.[123] Users could leave their computers for hours or even days at a time while Glider auto-played the game—it even picked up gold and weapons that enemies dropped. As MDY's website explained:

> Glider . . . moves the mouse around and pushes keys on the keyboard. You tell it about your character, where you want to kill things, and when you want to kill. Then it kills for you, automatically. You can do something else, like eat dinner or go to a movie, and when you return, you'll have a lot more experience and loot.[124]

Thus a user could potentially "glide" a new, un-played character full-time and gain experience points—the currency of skill development and other battle abilities—at a rate of more than seven times faster than the average user.[125]

Although Blizzard was already privy to the fact that cheating occurred, hundreds of thousands of complaints about the use of bots were submitted between 2004 and 2008, and thousands identified Glider by name. Blizzard initially responded by creating Warden—a detection and reporting program—and adding it to the client software. Warden identified when bots such as Glider were being used; the violations it reported resulted in penalties as serious as account suspension or deletion.[126] MDY responded by modifying Glider to evade detection—a successful and lucrative update that was quickly obviated by an in-kind response. The companies engaged in a series of update exchanges until the matter came before the court.[127]

Blizzard's claims were based on a clause in the user agreement that prohibited the use of third-party software to play the game in ways not intended by the developer—in essence, an infringement claim.[128] The court granted Blizzard's summary judgment motion as to its claims of tortious interference, facilitating copyright infringement, and trafficking in copy-

123. MDY Industries, LLC v. Blizzard Entertainment, Inc., 629 F.3d 928, 935 (9th Cir. 2010) (opinion amended by MDY Industries, LLC v. Blizzard Entertainment, Inc., Nos. 09-15932, 09-16044, 2011 WL 538748 (9th Cir. Feb. 17, 2011)).

124. *MDY Industries*, 629 F.3d at 935. MDY's website was shut down subsequent to the trial court ruling in 2009; visiting www.mmoglider.com now shows only a "forbidden" file permission error.

125. This is a rough estimate calculated using the average weekly in-world figure of twenty-two hours per week and an uninterrupted use of Glider over the same period of time, or 168 hours.

126. For a detailed discussion of the nature of the various copyright claims brought by Blizzard—namely, the difference between traditional claims pursuant to the unauthorized copying of protected content and to prohibit the improper use of protected content under the Digital Millennium Copyright Act—see *MDY Industries*, 629 F.3d at 943–52.

127. *See id.* at 936. *See also* LASTOWKA, *supra* note 5, at 180 (noting that MDY sold over 100,000 copies of Glider by 2008, netting profits of over three million dollars).

128. *MDY Industries*, 629 F.3d at 936.

right circumvention measures in violation of the Digital Millennium Copyright Act ("DMCA").[129] MDY appealed and the Ninth Circuit vacated the lower court decision, narrowing the basis of liability to the "trafficking" previously mentioned.[130]

Although the rationale underlying the decision is somewhat abstract, the fundamental justification is simple. MDY developed and marketed Glider as a tool that facilitated prohibited conduct—here, botting[131]—which it achieved by circumventing access control measures that Blizzard specifically implemented to proscribe such conduct.[132] The court read the statute sufficiently narrow to hold MDY liable for indirect copyright infringement while excluding individual users merely using the kind of software MDY created from purview of the DMCA. The court did, however, indicate that the violations of the user agreement were actionable under contract law, and thus suggested that individuals were not immune to suit.[133] More importantly, however, the *MDY* opinion underscored the developer's entitlement to some means of control over the way participants use its software and shifted the balance of equities decidedly away from the user.

Briefly reflecting on the broader implications of *MDY*, it is important to recognize that Blizzard sought an injunction for the benefit of the World of Warcraft users. Had the level of overt discontent not reached a critical mass, there would have been little motive to pursue legal action against MDY. Even the economic loss of subscription fees to discontented users could likely never outweigh the specific economic disincentive to litigation. But by going to court for the betterment of the realm, Blizzard not only vindicated its right to enforce its expectations of the user experience but it diversified the means to do so.

Contract liability for user agreement violations begs the question: to what extent can third parties litigate issues that the software developer may choose to avoid? Individual users have brought claims against other users for prohibited use of a virtual world under a third-party beneficiary theory.

---

129. MDY Industries v. Blizzard Entertainment, Inc., No. CV-06-2555-PHX-DGC, 2008 WL 2757357, at *17 (D. Ariz. July 14, 2008).

130. *Id.* Under the DMCA, the circumvention of measures taken by a developer to prevent prohibited use of its product constitutes copyright infringement. 17 U.S.C. § 1201(a)(2)(A) (2010).

131. Using bots, or automations programs, as described *supra* pp. 29–30.

132. *MDY Industries*, 629 F.3d at 953–54. The specific requirements for such a claim are "(1) traffic[king] in (2) a technology or part thereof (3) that is primarily designed, produced, or marketed for, or has limited commercially significant use other than (4) circumventing a technological measure (5) that effectively controls access (6) to a copyrighted work." *Id.* at 953. The specific application of § 1201(a)(2) in this case involves the "dynamic, non-literal" software elements under copyright protection. The court embarks on a detailed discussion in which it parses this aspect of DMCA liability as well as the other relevant considerations applicable to the copyright aspects of Blizzard's claim. *See id.* at 942–54.

133. *Id.* at 939–42.

One such example is the case of *Hernandez v. IGE*, a dispute in which a World of Warcraft user filed a suit against a real money trading ("RMT")[134] operation dedicated in part to commercial gold farming for harm arising out of a user agreement violation. The practice of gold farming is straightforward: employees work long shifts playing a game in order to collect gold, which the company then sells through a website or an auction site such as eBay.[135] Thus users can trade real money for in-world currency, which in turn can be used to buy powerful combat gear. The underlying problem is similar to that which arose in *MDY*: users who invest honest gameplay to get the *matériel* feel cheated when another simply pays for it at auction. Hernandez's claim specifically alleged that IGE's conduct violated the World of Warcraft user agreement and "substantially diminish[ed] the enjoyment and satisfaction consumers obtain by earning, through the expenditure of vast amounts of time and energy, virtual assets within [the game]."[136] The case, however, ended in settlement. IGE agreed to cease its virtual asset sales for a period of five years, though it denied any wrongdoing.[137]

Shortly before the *Hernandez* suit materialized, Blizzard initiated a similar action against a different RMT company.[138] In Game Dollar, like IGE, engaged in RMT activities, provided "power leveling"[139] services, and actively advertised over the game's chat system.[140] Here, though the claim was targeted at conduct that spoiled the fun for other users, it was the act of excessive advertising through the game's chat system—as opposed to RMT—that Blizzard chose to target.[141] As was the case with *Hernandez* and *MDY*, this dispute settled before trial.[142]

These examples are a few of a number of similar cases that demonstrate the efficacy with which user agreements have served the interest of promoting virtual world behavioral norms. In-game claims devices, such as

134. "RMT" is a common term referring to all activities involving the collection of virtual items with the specific purpose of selling them at auction or through an online retail gateway.

135. *See* LASTOWKA, *supra* note 5, at 22–25, 157.

136. Class Action Complaint at 2, Hernandez v. Internet Gaming Entertainment, LTD., No. 07-CIV-21403 (S.D. Fla. May 30, 2007).

137. Joint Stipulation with Attached Order, Hernandez v. Internet Gaming Entertainment, LTD., No. 07-CIV-21403 (S.D. Fla. Aug. 26, 2008).

138. *See* Complaint at 5–6, Blizzard Entertainment, Inc. v. In Game Dollar LLC, No. SACV07-0589 JVS (C.D. Cal. May 22, 2007) (alleging violations cause a loss of the game's immersive effect, deterioration of social environment, and degradation of the game performance).

139. Power leveling services are generally when a player pays another person to play the game in order to "level up" their character. This more-or-less achieves the same result as the Glider program did, yet the user can pay for a certain number of levels to be advanced within a certain amount of time rather than leave his or her character on autopilot for an unknown amount of time.

140. Complaint, *supra* note 138, at 5–6.

141. *Id.*

142. Consent Permanent Injunction, Blizzard Entertainment, Inc. v. In Game Dollar LLC, No. SACV07-0589 JVS (C.D. Cal. Dec. 17, 2007).

reporting systems for user-submitted abuse reports,[143] facilitate the enforcement of the terms of use but do not necessarily stop abuse from occurring. But the fact that both users and virtual world providers have leveraged the courts to address problems is evidence that virtual world service abuse is not necessarily the result of a failure on the part of the developer to enforce rules. Indeed, when it comes to gameplay ideals and "community standards" it appears that both developers and users have a stake in preserving the purity of the experience. Claims arising out of a purely personal interest, such as intellectual property rights, are almost exclusively pursued by users.

D. Intellectual Property and User Rights

The nature of virtual content has a tendency to frustrate effective copyright protection. For a clear example, one need only look to the ease with which a person can obtain unreleased movies or a musician's entire discography through any one of the myriad peer-to-peer file sharing networks.[144] In any virtual world, user-created content is merely computer code designed to look and act like consumer knick-knacks such as wardrobe accessories, armaments, or automobiles.[145] Non-aesthetic content could be any code that modifies the user interface or, as in *Eros, LLC. v. Leatherwood*, a Second Life script that augments the available avatar "poses"[146] to include certain sexual gestures.[147]

Of course, technologies exist that allow users to circumvent these protections and effectively remove the DRM permissions that control the extent to which an item can be owned or modified and by whom.[148] This undermines any purported intellectual property rights vested in the user and creates a significant disincentive for virtual entrepreneurs to engage the virtual market. Thus it would presumably be in the interest of both Linden Lab and the user to maintain those rights when practicable. Yet this has not been the case.

---

143. *See, e.g.*, *Community Standards*, SECOND LIFE, http://secondlife.com/corporate/cs.php ("Residents should report violations of the Community Standards using the Abuse Reporter tool . . . ."); *In-Game Policies*, BLIZZARD ENTERTAINMENT, (Jan. 15, 2013), http://us.blizzard.com/support/article.xml?locale=en_US&articleId=20309 (outlining World of Warcraft Harassment Policy, specifically, "user tools" to avoid and report harassment).

144. Searching for "Frank Zappa discography download" on Google.com returns over a half million results, the first page of which is entirely comprised of links to various peer-to-peer file networks that purport to offer for download the entirety of Zappa's legendary ninety-one-album collection.

145. *See* LASTOWKA, *supra* note 5, at 151 (discussing role of code).

146. Second Life avatars are pre-scripted to perform certain movements—or "poses"—such as walking, sitting, and sleeping. A user can theoretically mimic any action using other basic movement types. For example, one could "dance" by frantically turning and stepping her avatar in various directions, but a user who frequently "dances" in Second Life could opt to use the "dance" pose, which animates the avatar appropriately and adds an element of realism to the act.

147. *See* LASTOWKA, *supra* note 5, at 191–93 (discussing *Eros, LLC v. Simon*, No. 2007-CV-04447-SLT-JMA (E.D.N.Y. Oct. 24, 2007)).

148. Hunt, *supra* note 85, at 147–48.

The *Eros* case mentioned above is one of many claims[149] brought by Eros LLC, a Second Life developer of adult-themed products called SexGen beds. The beds provided both visual (the bed) and technical (the programmed poses) augmentations to the platform that allowed users to simulate sexual acts between their own avatar and other avatars.[150] The proprietor of Eros, Kevin Alderman, sold his real-life plumbing business to work full-time online. His beds sold for around forty-five U.S. dollars each, and they became quite popular in a short time.[151] Not long after putting the SexGen line on the market, he discovered what he believed were digital knock-offs of his products. Using a claims mechanism provided by Linden Research, he sought assistance in the enforcement of his intellectual property rights. Linden did not acquiesce to Alderman's requests to have the infringing items removed.

Taking matters into his own hands, Alderman applied for a copyright and trademark on the SexGen name and the programmed avatar animations.[152] He filed suit in federal court against Volkov Cattaneo, the avatar behind the copyright violations. Cattaneo initially failed to respond to the complaint so Alderman subpoenaed subscription records from Linden Lab, America Online, and Charter Communications in order to obtain the Cattaneo account information. Alderman finally identified the infringer as Robert Leatherwood, a Texas teenager.[153] Leatherwood declined to respond a second time to an amended complaint, but after default judgment was entered against him he negotiated a settlement that enjoined further violation of Eros' copyright.[154]

Another infringement case appeared under slightly different circumstances. *Minsky v. Linden Research Inc.* arose out of a trademark infringement claim. Minsky—a progenitor and patron of virtual objects *d'art*—published a Second Life art circular under the name "SLART"[155]—a humorous moniker he invested in after determining it was not previously used

149. *See* Complaint at 16, Eros, LLC v. Simon, No. 07-CV-04447-SLT-JMA (E.D.N.Y. Oct. 24, 2007) (alleging, *inter alia*, that defendants made and sold unauthorized copies of plaintiff's digital content).

150. Sharon K. Lowry, Comment, *Property Rights in Virtual Reality: All's Fair in Life and Warcraft?*, 15 TEX. WESLEYAN L. REV. 109, 115–18 (2008) (noting that Alderman claims to have sold thousands of SexGen beds).

151. *Id.* at 116.

152. *See id.* at 124. *See also* Jennifer Gong, Note, *Defining and Addressing Virtual Property in International Treaties*, 17 B.U. J. SCI. & TECH. L. 101, 116 (2011). Interestingly, confusion over the nature of the product resulted in significant difficulty in obtaining a trademark and copyright.

153. Lowry, *supra* note 150, at 124–25.

154. *Id.*; *see* Judgment by Consent as to Defendant Robert Leatherwood at ¶ 3, Eros, LLC v. Leatherwood, No. 07-CV-01158-SCB-TGW (M.D. Fla. Mar. 20, 2008); First Amended Complaint – Injunctive Relief Sought and Demand for Jury Trial, Eros, LLC v. Leatherwood, No. 07-CV-01158-SCB-TGW (M.D. Fla. Oct. 24, 2007).

155. A combination of the initials "SL," referencing Second Life, and "ART."

within or without the virtual world.[156] Minksy successfully applied for a trademark with the United States Patent and Trademark Office pursuant to Linden's representations that users had ownership over their intellectual property.[157] Another Second Life user later opened an art gallery using the name "SLART," and Minsky attempted to notify the user of the violation.[158] Following a Linden Lab reporting procedure similar to that which Alderman used, Minsky filed a report requesting removal of the infringing content. But the company declined to provide contact information for the offending user, indicated that Minsky misstated the origin of SLART, and that he had no trademark rights to the name.[159] Minsky filed suit against Linden, Linden executives, and John Doe (the offending user) alleging primary and contributory trademark infringement, tortious interference, and fraud.[160]

The case evolved into a claim solely against Linden after Minsky moved to dismiss John Doe, though it never went to trial. Before settlement in 2009, however, Minsky was granted a temporary restraining order ("TRO") compelling Linden to comply with the policies set forth for addressing user reports of trademark infringement. The TRO obligated Linden to contact any user that Minsky reported to be infringing on his SLART trademark and to remove the offending content if the user did not do so voluntarily.[161] Within the TRO, however, was a strict definition of what constituted infringing content. Linden successfully opposed a motion to compel after failing to remove reported content that, though nearly identical to Minsky's trademark, was technically beyond the scope of the definition provided in the TRO.[162] Regardless, the company settled the matter with

156. *See* Amended Complaint of Trademark Infringement and Dilution, Contributory Infringement and Dilution, Tortious Interference, Fraud at ¶ 12, Minsky v. Linden Research, Inc., No. 08-CV-819-LEK-DRH (N.D.N.Y. July 29, 2008) [hereinafter Minsky Complaint] (discussing the conception of the SLART name).

157. *See* SLART, Registration No. 3,399,258. All of the existing marks were distinct insofar as each included a space after "SL" (SL Art, etc), were pronounced differently than SLART, and the existing uses of SLART were unrelated to the Second Life world. *See supra* notes 155–56 and accompanying text; Minsky Complaint, at ¶¶ 15, 18–20.

158. Minsky Complaint, *supra* note 156, at ¶¶ 24–28.

159. *Id.*; *accord* Defendant Linden Research, Inc.'s Response in Opposition to Appeal of Magistrate Judge's Decision at 2, Minsky v. Linden Research, Inc., No. 08-CV-819-LEK-DRH (N.D.N.Y. Jan. 21, 2009).

160. Minsky Complaint, *supra* note 156, at ¶¶ 40–75.

161. *See* Temporary Restraining Order by Consent at ¶ 1, Minsky v. Linden Research, Inc., No. 08-CV-819-LEK-DRH (N.D.N.Y. Sept. 12, 2008).

162. *See* Memorandum-Decision and Order at 4, Minsky v. Linden Research, Inc., No. 08-CV-819-LEK-DRH (N.D.N.Y. Dec. 12, 2008) (stating, in support of a motion to dismiss, "[t]he plain language of the TRO clearly and unambiguously identifies uses that are infringing as those employing SLART as one word with all letters in a uniform size, font and color.") (internal quotations omitted).

Minsky, honoring his trademark rights and removing any impermissible content that remained.[163]

The unique nature of protected digital content in virtual worlds has been recently highlighted in a case involving two Second Life entrepreneurs that created virtual pets for users' purchase and entertainment. The plaintiff, Ozimals, Inc., developed and sold virtual bunnies; the defendant, Amaretto Ranch Breedables, created and sold virtual horses. The crux of the dispute was whether the virtual horses violated a copyright associated with the virtual bunnies due to the fact that the horses, like the bunnies, required food to survive.[164] The suit, which sought to enjoin Linden Lab from removing Amaretto's horses from the Second Life market, was brought following a DMCA takedown action filed by Ozimals.[165] The DMCA claim alleged that the food requirement constituted a specific functionality that was protected by copyright. Amaretto successfully contended that neither the product nor the programming violated software copyright law, and a preliminary injunction was granted pending the resolution of the action.[166]

Important here is not the nature of the lawsuit, but rather the very real problem that the "code is law" maxim creates with respect to the protection of virtual goods. Whereas software copyright law may be applicable to the myriad virtual goods that are created in Second Life and other virtual worlds, the goods themselves are neither used nor seen by users as software. For instance, Microsoft Word is a traditional piece of software in the sense that a user executes it in order to access the functionality it provides. On the other hand, a virtual pet is purchased not for its interaction with the system or for a specific functional capacity (like word processing), but for personal enjoyment akin to that which one might derive from owning a pet. And although the interaction with both traditional software and a digital pet is entirely confined to a series of calculations defined by lines of code, the virtual world atmosphere and culture materially alters the nature of the relationship between the user and the fiction created by that code.

The result of the conduct underlying these cases is largely confined to the devaluation of virtual currency and the souring of the virtual world experience. The impact on the real interests of users, as will be discussed in the following section, is not insubstantial. Cases have been decided on the terms of user agreements and have been settled in line with those terms; the problem, when understood in this light, is most closely tied to game developers' disinterest in the active enforcement of their rules.[167]

163. *See* Judgment Dismissing Action by Reason of Settlement, Minsky v. Linden Research, Inc., No. 08-CV-819-LEK-DRH (N.D.N.Y. Jan. 22, 2009).

164. *See* Amaretto Ranch v. Ozimals, Inc., No. 10-05696 CRB, 2010 WL 5387774, at *2 (N.D. Cal. Dec. 21, 2010).

165. *Id.*

166. *Id.* at 2–3.

167. *See* IAN WARREN & DARREN PALMER, AUSTRALIAN INST. OF CRIMINOLOGY, *Crime Risks of Three-Dimensional Virtual Environments*, *in* TRENDS AND ISSUES IN CRIME AND CRIMINAL JUS-

E. Legal and Social Codes of Conduct

Virtual world misconduct ranges from truly illegal to truly absurd, and the protection of user rights has occurred on a number of levels, both legal and non-legal. At the most local level, user communities independently institute unique social codes and quasi-legal procedures that operate only within the scope of the virtual world.[168] While remaining powerless to completely resolve issues such as copyright and trademark violations, these do serve to expand duties imposed by the rules of the game.[169] These rules are substantiated within the user agreements and any existing community code of conduct and form the basis for adjudication of internal claims raised through channels provided by the developer. As discussed above, these serve to rectify the terms of the user agreement only to the extent that the world provider is willing to enforce the rules it sets forth. The scope of actionable conduct—tantamount to the common law use of precedent—is generally at the discretion of the virtual world provider pursuant to the contractual right to run the virtual world as it sees fit.[170]

Legal claims generally involve conduct that violates existing provisions of law or contract not unique to virtual worlds. The legal theories generally focus on intellectual property rights, copyright, and trademark law while contract theories tend to turn on the usage guidelines set forth by the applicable user agreements. Yet the extent of copyright protection and the amount of legal interest a person has in the virtual assets acquired in a virtual world is directly related to the user agreement. Blizzard Entertainment, for instance, makes perfectly clear its intent to divest the user of all ownership and property interest in an account and the items acquired through that account.[171] The game, in this case, is a service and not a right—a user's account may be terminated at any time for any agreement

---

TICE, NO. 388, at 3 (Feb. 2010) ("The burdens of maintaining good order and resolving disputes in the numerous sites within any global multi-user [virtual world] 3dve platform makes stringent enforcement or dispute resolution processes impractical and unlikely."). *Id.*

168. *See, e.g.*, Notice of Official Judgment, In the matter of: Tiggs Beaumont and ElvenDeep Sim, (Oct. 14, 2007) (on file with author) (recounting the decision of a judicial panel in a Second Life "clan" regarding the banishment of a member for conduct which constituted "abuse of group membership").

169. *See* Sixma, *supra* note 64, at 10–15 (explaining various quasi-laws within the virtual world).

170. *See World of Warcraft Terms of Use*, BLIZZARD ENTERTAINMENT (Aug. 22, 2012), http://us.blizzard.com/en-us/company/legal/wow_tou.html ("Blizzard reserves the right to determine which conduct it considers to be outside the spirit of the Game . . . .").

171. *Id.* ("NOTWITHSTANDING ANYTHING TO THE CONTRARY HEREIN, YOU ACKNOWLEDGE AND AGREE THAT YOU SHALL HAVE NO OWNERSHIP OR OTHER PROPERTY INTEREST IN ANY ACCOUNT STORED OR HOSTED ON A BLIZZARD SYSTEM, . . . AND YOU FURTHER ACKNOWLEDGE AND AGREE THAT ALL RIGHTS IN AND TO SUCH ACCOUNTS ARE AND SHALL FOREVER BE OWNED BY AND INURE TO THE BENEFIT OF BLIZZARD.") (emphasis in original).

violation.[172] And pursuant to the ownership interests it reserves, Blizzard affirms that any transfer of virtual property is null and void.[173]

When the virtual world provider invests the user with greater legal ownership over items introduced into or acquired within the game, such as is the case with Linden Lab, decisions have still hinged on the terms of the user agreement. In *Bragg*, for instance, a defective contract merited the claim. *Minksy*, on the other hand, appears to favor the user's property interest, yet the TRO was issued on the basis that Linden had not delivered on its promise to honor and protect trademark and intellectual property rights. This posture was reflected yet again in the *Ozimals* case. But beyond the problem posed by lackadaisical enforcement of user agreement terms lies the fact that the terms themselves are determined exclusively by the developer; the agreement is a fluid instrument, not a constitution.

Linden Lab's unilateral alteration of the terms of the user agreement was raised in a recent class action suit challenging its diminution of user ownership rights.[174] The plaintiffs in *Evans v. Linden Research, Inc.* alleged that Linden Lab had incrementally substituted the language of ownership with the language of licensure, which served the purpose of slowly divesting Second Life users of rights that they had been promised, in which they had invested, and upon which they relied.[175] This all led up to the *coup de grâce*: the redefinition of Second Life's supposedly real currency as a licensed possession over which the user now exercised little or no genuine control.

> You acknowledge that Linden dollars are not real currency . . . and are not redeemable for any sum of money from Linden Lab at any time. You agree that Linden Lab has the right to manage, regulate, control, and/or modify the license rights underlying such Linden dollars as it sees fit and that Linden Lab will have no liability to you based on its exercise of this right.[176]

The plaintiffs opposed Linden's initial motion to dismiss based on a forum selection clause.[177] Relying on the *Bragg* decision, they argued that the user agreement to which they had originally agreed was the only relevant instrument, and it was unconscionable.[178] The court disagreed, noting that Linden had changed the language of the provision to mirror a forum

172. *Id.*

173. *Id.*

174. *See* Plaintiffs' Complaint in Civil Action at ¶ 178, Evans v. Linden Research, Inc., No. 10-1679 (E.D. Pa., Apr. 15, 2010).

175. *See generally id.* at 9–24 (alleging that Linden Lab had incrementally substituted the language of ownership with the language of licensure, which served the purpose of slowly divesting Second Life users of rights that they had been promised, in which they had invested, and upon which they relied).

176. *Terms of Service*, *supra* note 95, at § 5.1.

177. Evans v. Linden Research, Inc., 763 F. Supp. 2d 735, 737–38 (E.D. Pa. 2011).

178. *Id.* at 739.

selection clause that had been upheld, and each plaintiff had clicked 'agree' after the new terms were implemented.[179] Although the merits of the other substantive changes regarding ownership interests have not yet been addressed, the fact that the court upheld one such change suggests that the final decision will turn on what property rights were in fact conferred rather than any independently existing right. This is, again, consistent with other similar claims: the user agreement has indeed been pivotal to the disposition—whether by decision or by settlement—of the legal outcome.

Notably, only a few courts have recognized property rights in virtual possessions. And the cases giving rise to a judicial recognition of these rights are not within the United States' jurisdiction. Two arose in China, a country where claims are decided without regard to precedent and where an ongoing promotion of the video game industry has spurred the Public Security Ministry to issue advisory letters to support the protection of virtual property.[180] In one case, a defendant breached security measures that a virtual world provider had implemented on its servers in order to transfer a mythical virtual sword (worth over $1000 U.S.) from another user's account to his own. The defendant was found guilty of theft, and the sword was returned to the plaintiff's possession.[181] The second case involved a world provider employee who used his administrative powers to modify security information on some thirty accounts to gain access to and sell both the accounts and the virtual items possessed by the account holders. Here, too, the court found the defendant guilty of virtual property theft.[182]

Other jurisdictions have come to similar results in cases marked by real-world coercion, such as threats or use of force, to transfer virtual items.[183] It cannot be ignored, however, that real illegal conduct factored into the conviction and punishment for theft of virtual items in each such case.[184] Chinese courts have specifically found that a user's right of possession in a virtual item is superior to the developer's right of possession of the representative data in cases where the item is deemed to have monetary value and an independent legal violation has occurred. The same court sys-

179. *Id.* at 740–41.

180. Susan H. Abramovitch & David L. Cummings, *Virtual Property, Real Law: The Regulation of Property in Video Games*, 6 CAN. J. L. & TECH. 73, 78 (2007); Joshua A.T. Fairfield, *Virtual Property*, 85 B.U. L. REV. 1047, 1084–85 (2005) (analyzing the benefit the recognition of virtual property rights could have on the gaming industry in the United States).

181. Dave Gradijan, *China Fines Man for Stealing, Selling Virtual Property*, CSO SECURITY & RISK, Apr. 3, 2006, *available at* http://www.csoonline.com/article/215135/china-fines-man-for-stealing-selling-virtual-property.

182. *Id.*

183. *See, e.g.*, Deng Shasha, *Four People Sentenced for Virtual Property Theft*, CHINA VIEW, May 24, 2009, http://news.xinhuanet.com/english/2009-05/24/content_11427265.htm (beating and coercion); Edwin Feldmann, *Netherlands Teen Sentenced for Stealing Virtual Goods*, PCWORLD, (Oct. 23, 2009, 6:50 AM), http://www.pcworld.com/businesscenter/article/152673/netherlands_teen_sentenced_for_stealing_virtual_goods.html (beating and coercion).

184. *See* Fairfield, *supra* note 180, at 1084–85.

tem, however, has *also* held that no property right exists if no independent value exists (excluding "time and effort") and no other wrongful conduct has occurred.[185] Virtual property rights advocates have correctly pointed out that American courts vest property rights in non-literal and fleeting things—the ownership of farm animals, mineral rights, and easements are a few examples.[186] And though Chinese courts have recognized a broad right to exclude in some cases, the grant of such an absolute right by American courts would have permanent implications that conflict with the rights of companies that run the virtual worlds.

For example, in late 2010 Linden Lab summarily shut down the teen version of Second Life, thereby dispossessing *all* users of their in-world possessions.[187] Here, users of the closing world were invited to enter the adult world; Linden lowered the age restriction to sixteen years, and the remaining under-agers were awarded highly restricted access.[188] Moreover, the transfer of in-world possessions was selective: while many users had to register new accounts and "start over," institutions and organizations were allowed to transfer their investments and resume operations in the adult world.[189] If any right to exclude existed, this was a sure violation.

Similarly, a recent eBay policy change precludes the selling of virtual items by users of worlds that do not sanction RMT.[190] The implication here is the creation of asymmetric virtual property interests entirely dependent on the terms of the user agreement and contrary to any supposed right to transfer. The underlying problem is that to recognize absolute legal title to virtual property would implicate the corresponding data and obligate the developer, as guarantor of that property, to maintain the data for the benefit of the user. The result is to impose on world providers a function not unlike indentured servitude to the licensors of the services it provides.

These examples illustrate the underlying difficulty inherent in governing virtual property by established legal principles: though there may be legal similarities between virtual property and real property, other differences are irreconcilable. In the extreme case—the closure of a virtual world—the discontinuance of service is usually related to the financial and

185. S*ee* Wang Qingyun, *Court Dismisses Woman's Claim to Virtual Assets*, CHINA DAILY, Dec. 27, 2010, http://www.chinadaily.com.cn/china/2010-12/27/content_11761509.htm (discussing Chinese court decision that excluded virtual property with no real-world value from the terms of a divorce settlement).

186. *See* DURANSKE, *supra* note 96, at 93.

187. Maria Korolov, *Lindens Reverse Course on Teens*, HYPERGRID BUS., Sep. 28, 2010, http://www.hypergridbusiness.com/2010/09/lindens-reverse-course-on-teens/.

188. *Id.*

189. *Id.*

190. Justin Mann, *eBay Bans Sales of Virtual Goods*, TECHSPOT, (Jan. 29, 2007, 9:51 PM), http://www.techspot.com/news/24205-ebay-bans-sales-of-virtual-goods.html; *see also* Kayser, *supra* note 100, at 66 (highlighting an instance where Sony pressured eBay to remove auctions involving EverQuest virtual items).

technological capacity of the world provider.[191] The right to terminate service is commonly reserved by the user agreement and, moreover, is a reasonable response to economic or technological impotence.[192]

On the other hand, if Moore's Law[193] holds true and the computing capacity continues to double at least every two years, developers will write software that utilizes new technologies, which will on occasion require the complete redevelopment of the software platform. Even if it is assumed that the developer will continue to provide only updated versions of an existing virtual world, completely rewritten code raises compatibility issues. In the case where users contribute their own code, not every contribution will necessarily translate to newer versions of the software.[194] If such an event were to occur, the developer could not reasonably be required to accommodate every element of user-contributed code. Such an understanding is common: with the Windows operating system, for instance, the responsibility to maintain compatibility is attributed to the independent developers.[195] But in order to uphold absolute property rights the developer would be required to maintain compatibility for all user-contributed content. If it did not, it could potentially face claims arising from the widespread incompatibility issues that would invariably result from technological evolution.

Striking a balance between the creators of virtual worlds and the users populating these worlds is, and has been, a dubious endeavor. To give to one necessarily means to take from another; the law has yet to formally

191. *See The End is Virtually Nigh*, THE ECONOMIST, Dec. 8, 2005, at 14, *available at* http://www.economist.com/node/5244129 (discussing the closure of a virtual world due to a failure to "achieve critical mass," resulting in economic unviability).

192. *See, e.g.*, *Terms of Service*, *supra* note 95, at §§ 4.2, 4.5 (asserting that Second Life is a service and is provided at the discretion of Linden Lab, who is not liable for the temporary or permanent interruption of that service); *World of Warcraft Terms of Use*, *supra* note 170 (Blizzard may, "change, modify, suspend, or discontinue any aspect of the Game at any time . . . .").

193. Gordon E. Moore, *Cramming More Components onto Integrated Circuits*, 38 ELECTRONICS, no. 8, Apr. 19, 1965, at 1, 4, *available at* http://download.intel.com/museum/Moores_Law/Articles-Press_Releases/Gordon_Moore_1965_Article.pdf. Moore's Law is an observation about computer hardware production which states that the number of transistors that a manufacturer can incorporate into one integrated circuit doubles every two years. This correlates with CPU performance ratings, which have followed a linear development path fairly consistently since Moore initially published his article in 1965. Michael Kanellos, *Moore's Law to Roll On for Another Decade*, CNET NEWS (Feb. 10, 2003, 2:27 PM), http://news.cnet.com/2100-1001-984051.html.

194. Compatibility can be simplified as follows: the Second Life software platform allows users to create objects using different types of "building blocks." In a simple format, the blocks might be limited to squares, circles, and triangles. Redeveloped software, however, may replace triangle blocks with pentagonal blocks. Thus every user contribution that uses the triangle blocks, at the very least, will not "look" right because the pentagonal blocks will appear where a triangle block should. The reality is, however, that the number and type of blocks is very large, and many of the "shapes" available depend on the technology used. If older features are not reproduced in newer technologies, or if they are completely redesigned, then legacy content that uses features absent in new software will, like the contributions using triangles in the example, not work correctly.

195. This comparison was expressly recognized in the Evans complaint. *See* Plaintiff's Complaint in Civil Action, *supra* note 174, at 22.

determine what rights prevail. However, the lay of the legal landscape, as it were, decidedly favors the purveyors of virtual world services. Due to both the creative and developmental necessity for developers to maintain control over their creations and the predominantly game-like qualities of all virtual worlds, reason dictates the same result. Pending the resolution of the *Evans* case, it appears that one of two standards will emerge. Either a virtual world provider will be required to uphold the rights it purports to grant, or the unilateral modification of a user agreement will be permitted to the extent that the *Evans* facts do not constitute information superhighway robbery. Regardless, the user agreement as drafted by the world provider will continue to shape the nature of user rights. Or, in other words, even in virtual worlds creationist maxims hold true: one hand giveth, the other taketh away.

IV. What Economy, Precisely?

A beginning is the time for taking the most delicate care that the balances are correct.

From "Manual of Muad'Dib" by the Princess Irulan[196]

Despite the apparent ubiquity of enforceable user agreements as a viable means to resolve user claims, the argument remains that these agreements essentially serve to undermine rights that exist simply by the virtue of virtual presence. Arguments based on rights have ranged from strictly in-world matters, such as the right to avatar privacy,[197] to trans-world matters, such as a personal right to not be exiled from a virtual world.[198] Though users do, in fact, invest large amounts of money and time in virtual worlds, the ability to do so is hinged on continued access to them. And thus it is the providers of virtual world services that persist to define the limits of these rights—both in code and in contract.

The developers that avail themselves of the benefit of specific game objectives and fantasy tropes can readily address problems through user agreements due to highly congruent user interests in the game atmosphere. On the other hand, social- and economy-driven worlds face the additional complication created by the widespread introduction of very real financial ilk. Although virtual economies seemingly mirror real-world economies, the facial similarities are on the decline. The most prolific example—the economy of Second Life—has experienced artificial restraints, including the termination of in-world banking and gambling institutions, following

196. Frank Herbert, Dune 3 (1999).

197. *See, e.g.*, Palyan, *supra* note 100.

198. *See, e.g.*, Kayser, *supra* note 100, at 63. The author couches the argument in an analog to 'American values' stemming from the Declaration of Independence and the Constitution, asserting that, "[t]he players in these virtual worlds are not merely playing but living in the virtual space, [thus] exclusion from the virtual world amounts to something between extradition and execution." *Id.*

large-scale scams, regulatory enforcement complications, and the woes of Linden liability for a largely unregulated market.[199] Moreover, the recent overhaul of the language defining the lifeblood of the market—the virtual currency—as a license to use rather than a form of real currency signifies Linden's desire to take a step away from the real thing and a step closer to make-believe.

The cases discussed in the preceding section are not merely a sample of past and present claims, but represent a substantial portion of the existing body of law. For all interested parties—courts, developers, and users—the economic impact of the recognition of virtual rights is a primary concern. Although the voluntary adoption of absolute virtual rights—whether property or personal—by a virtual world developer is not completely out of the question, the common provisions found in user agreements *limiting* the legal obligations owed to users suggests it is unlikely. Thus it is through the vehicle of economic interests that the creation of such rights is apt to occur; and they are likely to be imposed rather than adopted.

The legal recognition of an individual virtual property right depends on the competing developer and user interests. But whether or not a specific user's right to a virtual chattel may be found superior to that of the developer, the blanket adoption of that right for all users and all chattels must also weigh in favor of the virtual community. Put another way, the imposition of a "right" on a virtual world must reflect the norms of that world and protect the users' needs and the developer's ability to address those needs.[200] This section provides a brief look at the participation and the subject matter of the virtual economies—mainly that which is maintained in Second Life—focusing specifically on the importance of what would likely be the first rights granted: virtual economic and property rights.

A. Scope and Significance

The first, and arguably most important, point is to again recognize that sanctioned real-world markets for virtual goods are not ubiquitous. The market, on the other hand, is doubtlessly thriving: users continue to pay subscription fees to participate, and they continue to pay one another for whatever item or add-on that allows them to participate in a satisfying manner.[201] Naturally, the impetus for world owners to actively participate in the

199. Robin Sidel, *Cheer Up, Ben: Your Economy Isn't as Bad as This One: In the Make-Believe World of 'Second Life,' Banks are Really Collapsing*, WALL ST. J., Jan. 23, 2008, at A1; Adam Reuters, *Linden Lab Outlaws Second Life Gambling*, REUTERS, July 26, 2007 (on file with author) (discussing Linden's restriction on "games of chance" in Second Life amidst legal ambiguity of online gambling).

200. *See* LASTOWKA, *supra* note 5, at 182–83 (discussing the importance of the freedom to construct rules of play that correspond to the users' notion of what falls within the "spirit of the game").

201. F. Gregory Lastowka & Dan Hunter, *The Laws Of The Virtual Worlds*, 92 CAL. L. REV. 1, 8 (2004).

world economy is a desire to share in the profits. Subscription-based platforms provide a steady income to cover the operating and expansion costs—more servers, increased storage capacity, staffing—attendant to any growth in a world's popularity.

Taxing in-world exchanges can also serve as a source of primary or supplementary revenue.[202] Blizzard Software recently implemented one such economic model. Shortly after the May 2012 release of Diablo III—the reigning sovereign of the hack-and-slash game universe—the gaming company unveiled the Real-Money Auction House ("RMAH"), which facilitated auction-style virtual item exchanges between players through the Diablo III client software.[203] Although in many ways Blizzard had "attempted the equivalent of drug legalization in the MMO market," the company successfully landed a piece of a substantial (and previously untapped in any official capacity) marketplace.[204] Successful auction sales are currently subject to a one dollar fee, and an additional fifteen percent transfer tax is applied when a user withdraws auction proceeds from his or her user account.[205] As is the case with its real-world counterpart, imposing a steep sales tax may eventually raise dissent among users, yet the initial user response seems to have centered on whether the RMAH has affected the integrity of the game.[206] In the end, however, the primary focus of the developer must be to maintain user interest regardless of how it chooses to maintain solvency. Without the user base there is no economy.

The extent to which the real-world initially took notice of virtual economies is evident in some of the corporate responses to the Second Life phenomenon. Coldwell Banker, a real estate firm employing over 120,000 persons in forty-five countries, entered the virtual real estate market in 2007.[207] The firm purchased large tracts of land in Second Life, subdivided its holdings into 520 smaller parcels, and contracted the construction of 520 virtual homes—half of which it would sell outright for twenty dollars apiece, the other half of which it planned to rent.[208]

Virtual development companies have thrived off this sort of corporate interest, charging anywhere from $15,000 to several hundreds of thousands

202. Between the time of the initial writing of this article and its subsequent publication, Blizzard Software implemented one such economic model. *See* discussion *infra* notes 204–07.

203. Blizzard Entertainment, *Real-Money Auction House Now Available in the Americas*, DIABLO III (June 12, 2012, 1:40 PM), http://us.battle.net/d3/en/blog/6360586/.

204. Paul Tassi, *Why Diablo 3's Real Money Auction House Should Not Be Your Summer Job*, FORBES, June 13, 2012, *available at* http://www.forbes.com/sites/insertcoin/2012/06/13/why-diablo-3s-real-money-auction-house-should-not-be-your-summer-job-2/.

205. *Auction House*, BLIZZARD ENTERTAINMENT, http://us.battle.net/d3/en/game/guide/items/auction-house (last visited Oct. 21, 2012).

206. *See, e.g.*, Tassi, *supra* note 204.

207. David Kirkpatrick, *Coldwell Banker's Second Life*, CNNMONEY, Mar. 23, 2007, http://money.cnn.com/2007/03/22/technology/fastforward_secondlife.fortune/index.htm (last visited Apr. 3, 2013).

208. *Id.*

of dollars to establish a unique corporate presence in a virtual world.[209] Indeed, big names including Coca Cola, American Apparel, and Intel have spent big money putting their brands in front of the virtual eyes of avatar-consumers.[210]

Although this corporate interest and the notion of virtual property ownership is most prevalent in Second Life, such use and acquisition of virtual property occurs in many virtual worlds. In November of 2010, a record was set for highest purchase price for a piece of virtual real estate. The property, consisting of "eight bio-domes, space docks, a stadium, club and mall," exists in Entropia Universe; the sticker price: $335,000.[211] At the time of the purchase, the seller was earning approximately $200,000 yearly from the sale of virtual goods, rental space leased to in-world retailers, and royalties from services offered within the property.[212] At the other end of the economic spectrum, there are myriad items for sale costing pennies or less.

B. How Popular, Really?

In 2007 analysts predicted that "[b]y the end of 2011, eighty percent of active Internet users (and Fortune 500 enterprises) will have a 'second life', but not necessarily in Second Life."[213] The number of users registered for one of the myriad virtual worlds available broke the one-billion mark in 2010.[214] Second Life and World of Warcraft recently reported user estimates of fourteen and eleven million, respectively.[215] A majority of the popular U.S.-based online multiplayer games—meaning those that are not predominately social platforms—employ a subscription revenue model.[216] Subscription data provides a fairly accurate estimate of the active user base

209. *See* Daniel Terdiman, *'Second Life' Dreams of Electric Sheep*, CNET NEWS, (Apr. 3, 2006, 4:00 AM), http://news.cnet.com/Second-Life-dreams-of-Electric-Sheep/2100-1043_3-6056759.html; Frank Rose, *How Madison Avenue Is Wasting Millions on a Deserted Second Life*, 15 WIRED MAG., no. 8, July 24, 2007, *available at* http://www.wired.com/techbiz/media/magazine/15-08/ff_sheep?currentPage=all.

210. *See* Rose, *supra* note 209.

211. Chiang, *supra* note 84.

212. *Id.*

213. Press Release, Gartner, Inc., Gartner Says 80 Percent of Active Internet Users Will Have A "Second Life" in the Virtual World by the End of 2011 (Apr. 24, 2007), http://www.gartner.com/it/page.jsp?id=503861 [hereinafter Gartner Press Release]. The company identified five laws that companies entering virtual worlds should recognize: first, that virtual worlds are not simply games but not yet parallel universes; second, that "[b]ehind every avatar is a real person"; third, that relevance and contribution is valuable; fourth, that there is a foreseeable "downside"; and fifth, that "[t]his is a long haul." *Id.*

214. *Virtual World Registered Accounts Breakthrough 1bn*, KZERO, *available at* http://www.kzero.co.uk/blog/virtual-world-registered-accounts-breakthrough-1bn.

215. WARREN & PALMER, *supra* note 167, at 2.

216. *See* U.S. MMORPG Companies Need to Offer More Free Games - Not Subscription Models - to Grow Market, REUTERS, July 22, 2008, *available at* http://www.reuters.com/article/-2008/07/22/idUS177521+22-Jul-2008+PRN20080722.

simply because it connotes a desire significant to justify the assumption of a cost. Mere registration data, on the other hand, can be misleading. In a virtual world that costs users nothing to participate, a user may own multiple accounts and accounts may go dormant as users lose interest; even accounts that are rarely used are counted in the total "population." This observation is consistent with the fact that virtual worlds understood to be nothing more than games—regardless of any sense of ownership over in-world possessions—are far more popular than their social-oriented counterparts.[217]

Second Life provides a fine example. To determine the "population" of the world, Linden counts each individual avatar whether it is actually used, whether it is the sole avatar registered by a single user, or whether it is one of many. At times it has been estimated that as much of eighty-five percent of the registered avatars are entirely unused.[218] During the first quarter of 2013 the total number of registered users totaled 33,326,134.[219] Yet statistical analysis conducted using data released by Linden Lab warrants an even more pessimistic conclusion. In 2004—a time when Second Life was relatively unknown, there were approximately 25,000 users registered for the service and between six and nine thousand users could be found online at any given time.[220] Two years later, after the service had gained more popularity, user registration had increased to 1.1 million, but user concurrency rates had only jumped to between eleven and twelve thousand.[221] In 2013, the concurrency rate reached forty-five to forty-nine thousand users.[222] The ratio of user concurrency to user registration, thus, dropped from thirty-six percent to one percent to a little more than one tenth of one percent in 2004, 2006, and 2013, respectively. Although the rate of user subscription—a prerequisite to benefits such as land ownership and the creation of any truly custom content[223]—is not published by Linden Lab, even if the concurrent user rates reflected the subscription user rates, the number of paying Second

217. *See* Gartner Press Release, *supra* note 213.

218. Rose, *supra* note 209.

219. Daniel Voyager, *Second Life Statistics 2013 Spring Update*, DANIEL VOYAGER'S BLOG, (Apr. 2, 2013), http://danielvoyager.wordpress.com/2013/04/02/second-life-statistics-2013-spring-update/ (last visited Aug. 25, 2013).

220. Is Second Life Successful (Mar. 25, 2007) (unpublished report) (on file with author). Until the beginning of 2008, Linden Lab actively released usage metrics for public use. Skepticism over the viability and popularity of Second Life, however, has contributed to a more closed-door approach. Linden has ceased to publish this kind of raw data and no longer hosts past databases on its website, although the company does periodically issue press releases regarding select data trends.

221. *Id.*

222. Voyager, *supra* note 219.

223. *See Premium Membership*, LINDEN LAB, http://secondlife.com/premium/ (last visited Aug. 25, 2013). Custom content constitutes user-created code that is written outside of the world platform or designed in "premium-only sandboxes" and implemented in the system, as opposed to that which is created using the basic in-world design software. It stands to reason that such content, which ranges from complex objects *d'art* to the aforementioned SexGen bed, should require

Life users is falling far out of proportion to the casual, inconsistent users that make up the bulk of the world's supposed market participants.

The potential for economic success that Linden Lab has insistently suggested to the real-world has yet to be realized. During January of 2010, the number of users whose online accounts ended with a positive income flow topped 70,000.[224] The caveat here is that any positive account value was counted for purposes of this figure, including those users who received free Linden dollars at one of the game's most popular locations, Money Island.[225] Of those 70,000 users who earned money in the world, only 1.64% made the equivalent of a minimum wage (based on a $7.25 hourly standard).[226] At that time there were around eighteen million registered users;[227] yet in March of that year only 1,083,856 unique users had used the service, 6.36% of whom earned at least one Linden dollar during that thirty-one-day period.[228] Assuming these figures remained relatively consistent during the first quarter of 2010, this suggest that only one-tenth of one percent of the March 2010 users (1.64% of 6.36%) who earned anything were actually pulling in an amount equal to minimum wage.

During the same quarter (January–April, 2010), there were approximately 803,000 users that logged in more than once monthly and 496,000 accounts that participated in at least one transaction.[229] Market statistics issued by Linden Lab reveal a dying economy: while March 2007 alone saw over $7 million U.S. exchange virtual hands, the entire fourth quarter of 2010 measured in at $3.5 million U.S.—an average of $1.17 million each month.[230] During this time, the ratio of economic growth to total population growth reduced by a factor of over twenty.[231]

This data is not presented to show that virtual economies are entirely negligible, or that participants in these economies do not need or desire any form of legal protection. Rather, it highlights the tendency of virtual economies to gravitate toward the focus of the game, whether or not the game is a product of design or a product of imagination. As one *L.A. Times* writer

---

additional fees as the presentation and maintenance of these items inside the virtual world inherently requires more computing power and data storage space.

224. The Economic Truth of Earning Income in Second Life (Mar. 9, 2010) (unpublished report) (on file with author).

225. *Id.*

226. *Id.*

227. Daniel Voyager, *Second Life Metrics*, DANIEL VOYAGER'S BLOG, http://danielvoyager.wordpress.com/sl-metrics/ (last visited Aug. 25, 2013). Note that "registered user" does not necessarily mean unique user.

228. The Economic Truth of Earning Income in Second Life, *supra* note 224.

229. Linden, *The Second Life Economy in Q4 2010*, *supra* note 83. These figures represent U.S. dollar amounts.

230. *Id.*

231. *Second Life Metrics*, *supra* note 227. There were five million registered accounts in March 2007 and eighteen million registered accounts in February 2010. The economy-population ratio at those times was 1.4 and 0.065, respectively.

observed, "a three-dimensional online society where publicity is cheap and the demographic is edgy and certainly computer-savvy . . . should be a marketer's paradise."[232] But when companies found that the Second Life "fantasyland" was a market of and for itself, and exclusive of "real-world" interjection—users held protests, wrote angry letters, and began to ignore the corporations they saw as intruders into their space.[233] One of the more notable events was the disruption of an in-world CNET interview with the land baroness Anshe Chung, in which a few technically inclined users assaulted the interview participants with flying phalluses.[234]

Of course, one may enter the world to do real-life things such as shop for knick-knacks or design a widget to sell to other users, but unless it panders to a common Second Life pastime, it likely won't be of much interest to anybody since its only real use is confined to the virtual world.[235] Although the half-million economic participants seem to suggest otherwise, this figure must be tempered by the fact that, in Second Life, appearances are (almost) everything.[236] Chic and risqué clothing, beds pre-programmed with graphic animations, the virtual "parts" that are used on the beds, and any other gizmo that pairs well with the most popular in-world locations (virtual brothels and strip clubs)[237] are all Second Life favorites. Although perhaps not the most flattering depiction, Second Life appears to be a twenty-first century *Pinocchio*. It is a platform that wants to do that which it cannot: lose the wood and get real.

The scant number of users either purchasing subscriptions or generating income, the withdrawal of corporate investment, and the standard user practice of conducting low-value transactions suggests that the interests of the large majority of the Second Life users is not one that will necessarily be served by the creation of a virtual property right independent of the user

232. Alana Semuels, *Virtual Marketers have Second Thoughts about Second Life*, L.A. TIMES, July 14, 2007, http://articles.latimes.com/2007/jul/14/business/fi-secondlife14.

233. *See*, *e.g.*, *id.* In response to an article concerning a Coca-Cola promotion launched in Second Life, one user remarked, "Kill me if I understand the whole SL marketing projects. They all look pretty much lame to me." Mack Collier, *Coke Gets a Second Life*, THE VIRAL GARDEN (Apr. 20, 2007), *available at* http://moblogsmoproblems.blogspot.com/2007/04/coke-gets-second-life.html (comment below blog post).

234. Stephen Hutcheon, *Second Life Miscreants Stage Members-only Attack*, SYDNEY MORNING HERALD, Dec. 21, 2006, http://wwwv.smh.com.au/news/web/good-grief-bad-vibes/2006/12/21/1166290662836.html.

235. *See* Gartner Press Release, *supra* note 213.

236. *See generally* Lisbeth Klastrup & Susana Tosca, *"Because It Just Looks Cool!": Fashion as Character Performance: The Case of WoW*, 1 J. VIRTUAL WORLDS RES., no. 3, Feb. 2009, at 3, 4, https://journals.tdl.org/jvwr/article/view/305/427 (concluding the acquisition of items to change the avatar appearance—regardless of any intrinsic usefulness—is a highly important endeavor common to all virtual worlds).

237. Semuels, *supra* note 232; *see also* Rose, *supra* note 209 ("On a random day in June, the most popular location was Money Island (where Linden dollars, the official currency, are given away gratis), with a score of 136,000. Sexy Beach, one of several regions that offer virtual sex shops, dancing, and no-strings hookups, came in at 133,000. The Sears store on IBM's Innovation Island had a traffic score of 281; Coke's Virtual Thirst pavilion, a mere 27.").

agreement. And even though the benefit of imposing the right might arguably outweigh the cost of doing so, the fact remains that this would necessarily create a series of duties incumbent on both the users and the developer. The result is that both the "right to play" and the "right to design" would be restricted. The less intrusive alternative, as discussed in the previous section, is to allow Linden Lab to adapt a user agreement to suit its users' needs. The same courts that would otherwise be required to vindicate independent virtual property rights claims could instead focus on ensuring that the contracts entered into by users and developers are properly observed. This would afford virtual worlds the freedom to evolve and ensure that the users investing in virtual worlds continue to play—or are, at least, free to do so if they choose.

V. EAST CODE, WEST CODE

> *In the most carefully constructed experiment under the most carefully controlled conditions, the organism will do whatever it damn well pleases.*
>
> 'Some Wag'[238]

Despite a multitude of claims spanning a variety of legal bases, the fact that few cases in American jurisdictions have actually moved beyond the preliminary stages of litigation is revealing. Indeed, litigious gamers are in some respects a marginalized class armed with perplexing claims.[239] But the online multiplayer gaming industry is becoming increasingly profitable. In particular, the number of users and the popularity of virtual worlds continue to increase, thus demanding more judicial attention.[240] Yet the natural and likely tendencies of most users—especially those playing for the sake of play—are directly at odds with the notion of real-world law governing virtual world behavior. Though this does not dissolve the responsibility incumbent on game developers to protect the rights it grants to users (especially when those rights have real-world implications such as is the case with virtual economies), it mitigates both virtual world law and virtual rights advocates' sense of urgency.

User agreements, moreover, have been demonstrated as an effective means to govern the use of virtual worlds, though some doubt has been raised as to their viability in cases of long-term user-developer relationships.[241] Yet the unstable, fickle nature of these worlds—at once being cre-

238. Morningstar & Farmer, *supra* note 13, at 12. The speaker of this quote, "Some Wag," has a moniker that I did not invent. *See id.*

239. *See* Kayser, *supra* note 100, at 61–62.

240. *See Strategy Analytics: Global MMORPG Market to Hit $ 8 Billion in 2010; Blizzard, Shanda and Netease Lead the Market*, BUS. WIRE, Aug. 10, 2010, *available at* http://www.businesswire.com/news/home/20100810006504/en/Strategy-Analytics-Global-MMORPG-Market-hit-8.

241. *See* Castranova, *supra* note 100, at 76–78.

ated and recreated by both users and developers—and the equally unstable and fickle nature of the technology upon which these worlds depend begs the question of whether this is a pressing concern. The malleability of these agreements reflects the experimental nature of virtual worlds and the frivolity with which many users treat their virtual identities. Unlike the real-world, in a virtual world there is such a thing as no-strings-attached; nothing is necessarily permanent; and in-world personal catastrophe, social crisis, or fake-financial ruin may be remedied as easily as clicking restart. "Long-term" does not quite carry the same meaning in virtual reality.

Contract malleability has, in a sense, allowed developers to make unilateral decisions regarding world governance such as Linden Lab's act of reigning in its promise of virtual property rights—a decision made at least in part due to liability and enforcement concerns. Yet it also indicates incapacity to provide what seems to have been intended: an environment that is virtually real. Whether this realization came pursuant to experience dictating that virtually real is not as simple as is it appears or the emergent necessity of quasi-governmental involvement, the bottom line is that the service providers have demonstrated that they simply do not want to go there. Corporate use of these worlds, too, is being "outsourced" as both businesses and advertisers are creating stand-alone platforms to suit their particular needs.[242] A core motivation to do so is not very different from one that drives more traditional virtual world developers: control.[243] Control and, of course, unmitigated access to the real-world consumers who apparently do not frequent social virtual worlds enough to maintain corporate interest.

Beyond that which has already been discussed, what can be gleaned from the social, fiscal, and corporate trends in virtual world use does not inspire the image of an explosive phenomenon with far-reaching real-world implications which command a need for external legal implements. It is not the Life 2.0 imagined in science fiction movies and futurist fiction novels. Instead, the result is more a reconsideration of what it is to play—at least one researcher has suggested parallels to common children's games, dress-up, and house.[244] To journalist Julian Dibbel, "[t]he future of play has never looked so open-ended, protean, and complex—or, to put in another way, more like Second Life."[245]

Understood this way, it only seems natural to afford the users and creators of these virtual worlds an effective and sufficiently flexible means to regulate behavior within virtual worlds. To borrow the language of Profes-

242. Aili McConnon & Reena Jana, *Beyond Second Life: Companies Thinking Twice About the Popular Virtual World are Finding More Security and Flexibility in Alternatives*, BUSINESS-WEEK, June 11, 2011, *available at* http://www.businessweek.com/magazine/content/07_24/b4038417.htm.

243. *Id.*

244. *See* Klastrup & Tosca, *supra* note 236, at 15.

245. Julian Dibbell, *Serious Games*, MIT TECH. REV., Dec. 21, 2010, at 74, 76, *available at* http://www.technologyreview.com/review/422131/serious-games/.

sor Lessig: West Coast Code, the rules provided by developers, will always be more capable in this capacity than East Coast Code, the rules prescribed by Congress: "it's faster, cheaper and more reliable."[246] To that end, Professor Lessig's comments on code in relation to the question of its "governmental capacity" are instructive:

> Rather than condemn, the trick is to critique. We must develop the same critical sensibilities for code that we have for law. We must ask about West Coast Code what we ask about East Coast Code: Whose interests does it serve and at what price? Is it consistent with values we believe fundamental? Does it protect certain interests (copyright in particular) more than our tradition, and our Constitution, would?[247]

If the virtual worlds are limited by the intrusion of real-world law, one of the fundamental tenets of virtual worlds—play—degenerates. Absent this element, the allure itself might lose its luster, the users may abandon their collections of now virtually real (limited-license) belongings, and the economies will collapse. Oddly, the "rights" demanded by many entrants and enthusiasts are under no circumstances unassailable, whether governed by contract or by law. Yet it seems the mechanism by which these rights apparently should be protected—judicial and congressional recognition—will, in the end, undermine the purpose.

For the time being, the ways in which in-world behavior affects real-world interests must abide the real-world laws applicable to those interests. Indeed, existing law is more than competent to address such concerns; so much has been demonstrated in the courts already. And so long as the impetus for intervention is contingent on a decision by a virtual world developer (a group of software programmers) to give more or take more, it is not generally the duty of courts or Congress to introduce extra-contractual duties. Admittedly, virtual worlds are, and virtual worlds will assume, a place of importance in modern society as their social and commercial use becomes more widespread. Today, however, the occasion has not yet arisen to corral users and developers of these worlds into the framework of a full-fledged and dedicated legal regime. Perhaps when one can answer in the negative the question of whether it's a game any longer, a bona fide need for virtual law will appear. But for the time being, a game it necessarily remains.

246. *See* Lessig, *supra* note 110.
247. *Id.*